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CANADA

MEDICAL & SURGICAL

JOURNAL.

A Monthly Record of

MEDICAL AND SURGICAL SCIENCE.

EDITED BY

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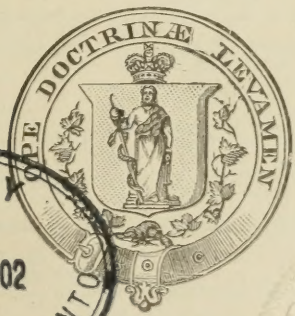
VOL. XIII.



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1885.

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CANADA

MEDICAL & SURGICAL JOURNAL

AUGUST, 1884.

Original Communications.

THE OLDEST MEDICAL JOURNAL IN CANADA.

By RICHARD MacDONNELL, M.D., Montreal.

A few months ago there came into my hands a volume of the first medical journal published in this country. The readers of the Canada Med. & Surg. Journal may possibly find some extracts interesting as well as instructive.

In January, 1826, the *Quebec Medical Journal*, edited and published by Dr. Xavier Tessier, began its career. It appeared every three months, and was a remarkably well printed and well got up little journal, the articles being written, some in French, some in English. In the preface, the editor alludes to the great progress the profession in Canada has been making, and hopes that before long the doctor's apprentice (l'éleve du médecin) will find in his own country the means of gaining the knowledge that will enable him to become a fit guardian of the health of his fellow-citizens.

The journal is undertaken with the view of benefiting the medical profession and of destroying those superstitious prejudices on the part of the public which tend to continually paralyze that zeal for scientific pursuits which should characterize the Canadian physician.

Each number of the *Quebec Medical Journal* is divided into three parts. 1, Reviews of standard medical works. 2, Record of recent advances and discoveries in the science of medicine. 3, Original articles and news items of local interest.

The first number of the *Journal* contains lengthy reviews of

some of the famous medical works of that day. Ward "*On Distortions of the Spine*," and Sir Astley Cooper's work "*On Fractures*" occupy the greater part of the number, the articles being selected from the *London Medical & Physical Journal* (the *Medical Times & Gazette* of the present day.)

The domestic department interests us most. An epidemic of measles visited Quebec in the autumn of 1823, and lasted until January. It was observed that in few cases was there a bright eruption, but that almost universally the skin was very pale, the sweating profuse, and that retrocession of the rash was of very frequent occurrence. Many children died of the disease.

The editor exhorts his *confrères* to struggle against the foolish popular prejudice in favor of over-heating the patients in measles and small-pox. The dislike of the French Canadians to vaccination is noted by the editor: "L'indifference qui règne en ce pays pour la vaccine (Picotte de vache) est portée à un tel point, qu'il nous est arrivé plus d'une fois d'avoir été refusé d'inoculer des enfants parce que nous ne voulions pas inoculer la petite vérole." By an unfortunate fatality, he goes on to say the introduction of vaccine into Canada has been accompanied by difficulties originating in the carelessness and negligence of those in charge of public institutions in neglecting to interest the public in the beneficial results of vaccination.

The quarterly report of the Montreal General Hospital, from the 1st February to the 1st May, 1825, shows that there were 83 admissions in the quarter. On the 1st of May, 1825, there were 13 patients in the institution. During the whole three months there were but 146 consultations in the out-patient department. Drs. Caldwell and Robertson had attended during the quarter, and the latter had prepared the report. The following were the diseases treated:—Remittent fever, 2; continued fever, 7; inflammation of the eyes, 2; delirium tremens, 1; inflammation of the lungs, 9; inflammation of the peritoneum, 1; consumption, 1; inflammation of the liver, 2; rheumatism, 4; white swelling, 2; scald head, 3; measles, 1; erysipelas, 2; catarrh, 10; dysentery, 2; dyspepsia, 2; scrofula, 1; syphilis, 3; psoriasis, 2; cancer 1; scald, 2; whitlow, 2;

fracture, 4 ; fracture, compound, 1 ; distorted spine, 1 ; concussion, 1 ; deafness, 1 ; contusion, 1 ; sprain, 1 ; ulcers, 7 ; frostbitten, 1 ; itch, 3. Total, 83. The reports for the next two quarters were prepared by Drs. Stephenson and Holmes respectively.

Dr. Louis Talbot contributes to the April number a report on the diseases which have prevailed in Three Rivers and its environs from Aug. 25th, 1825, to March 26th, 1826. Here is a good description of typhoid fever occurring in the country. A violent storm occurred in August, which the author considers to have been the cause of an outbreak of fever in that district. " Une espèce de synochus ou fièvre continue, dont les principeaux traits partagaiént de la nature du typhus." Several in the same family were attacked at the same time, but the symptoms varied in each patient. Many died of it. In almost all the cases there were symptoms referable to the brain, the lungs or the intestines. Headache was present, but disappeared at the end of three or four days, leaving all the other febrile symptoms unabated. There was obstinate diarrhœa, which tended to recur after the use of astringent remedies. The endemic lasted until the winter time, and then made its appearance in certain villages on the south shore of the St. Lawrence. Dr. Talbot specially notes that the autumn seemed more a continuation of summer than the approach of winter. This storm caused much mischief, according to the good doctor's way of thinking, for he attributes two more epidemics to its malign influence—one of measles, another of whooping cough.

In the same number, Dr. C. N. Perreault of Quebec reports an interesting case of meningitis caused by the presence of a worm in the ear. " L'enfant de M. Paul Thibaudeau, Bourgeois de cette ville, âgé de deux ans et demi," suddenly complained of violent headache and pain in the right ear. This continued from September, 1823, to March, 1824, accompanied with fever and slight convulsions, contraction of pupils, and other symptoms of pressure at the base. The case was therefore regarded as one of acute hydrocephalus. After using many remedies, it was found that large doses of opium alone gave relief. Dr.

Perreault being at this crisis summoned, applied large emollient poultices to the right ear. Ten days afterwards the mother noticed something in the right ear. Dr. Perreault extracted "un ver long d'environ cinq pouce et demi et de grosseur proportionée, ressemblant parfaitement à ces vers blancs que les enfants rejettent souvent par l'estomac ou par les selles." Recovery followed.

Mr. John Gray, surgeon of St. Gervais, reports the extraction of a pin from the perinæum of a boy who for five years had been suffering from wandering pains in the abdomen, followed by a difficulty in voiding either urine or fæces.

Drs. Morin and Painchaud report success in the treatment of uterine hemorrhage by ergot of rye.

In the first quarter of 1826 Dr. Tessier reports the prevalence of typhus in Quebec, and recommends the plan of treatment of some practitioners—the use of cold water both externally and internally during the course of the fever.

An epidemic of influenza occurred in Lower Canada that winter. More than half the people were attacked. The treatment in vogue at this time consisted in rest in bed, steam inhalations, combined with the administration of James' powder and calomel.

An extract from the *Lancet* reports a case in which Mr. Mohr, a Berlin surgeon, extracted six worms from the ear of a child who had labored under the same train of symptoms noticed in Dr. Perreault's case. Two of them were said to have been deposited in dry earth, and to have, in two days, been transformed into chrysalides; in five days they became perfect insects, with spotted wings, belonging to the genus *tachina*.

The July number contains a list of subscribers to the *Journal*, and amongst them we find His Excellency the Governor-General, the Honorable the Chief Justice, Monseigneur le Coadjutor de Quebec, l'Hon. Orateur de la Chambre d'Assemblée, the Hon. the Collector of Customs, the Attorney-General, the Military Inspector of Hospitals; F. Blanchet, chirurgien, &c., M.P., Quebec; Hugh Caldwell, surgeon, &c., Quebec; E. W. Carter, surgeon, &c., Sorel; A. Cherrier, avocat, Montreal; Thomas

Fargues, M.D., Quebec; Anthony von Iffland, surgeon, Sorel; P. Laterriere, chirurgien, les Eboulements, and many others.

A very grand public dinner was given by the profession in Quebec to Dr. Pierre de Sales Laterriere, at Malhiot's Hotel, on the 31st August, 1826. The departure of Dr. Laterriere for England was the occasion of the banquet. Dr. F. Blanchet, who was in the chair, proposed the following toasts. The band of H.M. 71st Regiment supplied the appropriate music.

After the King and the Royal family had been duly honored, the health of His Excellency the Earl of Dalhousie was proposed and responded to with three times three right loyally.

The chairman, in proposing the health of the guest of the evening, observed that not above thirty years ago there had not been in Canada one medical man a native of the country. The present meeting was composed chiefly of Canadian practitioners, some of whom had already achieved a well merited celebrity in the profession. Not long ago he was the only Canadian practitioner in the whole country. He referred to Dr. Laterriere in most eulogistic terms, and spoke of the unremitting efforts he had made in aiding the advancement of the medical profession in his native land—(cheers)—the leading part he had always taken in the founding and improving of charitable institutions, and his disinterested loyalty in sacrificing his professional career, in order to take part in the defence of his country.

Dr. Laterriere, in responding, said that he was glad of the opportunity of publicly expressing his gratitude to his professional brethren for the valuable services they had rendered him during the long and painful illness from which he had just recovered. Turning to the subject of medical education in Canada, he bitterly deplored the entire absence of medical schools in the country. The search for knowledge in foreign lands entailed expense so great as to bar the entry into the profession of many who might have become its ornaments and contributed to its advancement.

The following toasts were then duly honored:—

"To the memory of John Hunter and the medical institutions of Great Britain." *National March.*

"To the memory of Xavier Bichat and the medical institutions of France." *French March.*

"To the memory of Benjamin Rush and the medical schools of the United States." *Yankee Doodle.*

"To the Charitable Institutions of Canada." *Canadian March.*

"To the Countess of Dalhousie and the Canadian Fair." *Lady Mary Ramsay's Reel.*

"To Madame Pierre de Sales Laterriere and her family." *Canadian Air.*

"The Board of Examiners,—May it continue to be composed of men who will always have at heart the respectability of the profession in the country." *Canadian Country Dance.*

"The Hotel Dieu of Quebec, an asylum for the indigent sick. May it also become the asylum for medical science in Canada." *Canadian Air.*

The guest of the evening then rose and proposed to drink to the success of the *Quebec Medical Journal.*

"The *Quebec Medical Journal*,—May the physicians and surgeons of this country and the public in general give to this work the degree of encouragement to which it is entitled." *A la claire fontaine.*

Several volunteer toasts were proposed, and songs were sung by Drs. Laterriere, Whitelaw, Tessier, &c.

Take it all in all, it was a very pleasant evening.

In January, 1827, Dr. A. F. Holmes and Dr. Arnoldi, of Montreal, published in the *London Medical & Physical Journal* a case of malformation of the œsophagus and trachea. This gave dire offence to the editor of the *Quebec Medical Journal.* He takes them to task for not publishing in their native journal. He is totally unaware whether this conduct has been intended as a sort of bravado offered to his journal, but on consideration, thinks them incapable of such a base motive.

In another editorial, Dr. Tessier truly states that 1826 will be a memorable year in the history of medicine in Canada. It is the date of the birth of the first medical journal and of the first medical society.

At a general meeting of the medical practitioners of Quebec,

held on the 30th November, 1826, Dr. Joseph Morin in the chair, it was resolved that a medical society be formed. Its constitution, which resembled that of modern institutions, was drawn up. Dr. Morin was selected President; Dr. C. N. Perreault, Vice-President; and Dr. Tessier, of the *Journal*, Secretary.

The *Quebec Journal* died of starvation in 1827. What became of the Quebec Medical Society?

QUARTERLY RETROSPECT OF OBSTETRICS AND GYNÆCOLOGY.

Prepared by WILLIAM GARDNER, M.D.,
Professor of Gynæcology, McGill University; Attending Physician to the University Dispensary for Diseases of Women; Physician to the Out-Patient Department, Montreal General Hospital.

Our Present Knowledge of the Relations between Micro-Organisms and Puerperal Fever.—This is the title of a timely paper by Dr. Lomer, assistant at Professor Schröder's clinic in Berlin, appearing in the July (1884) number of the *American Journal of Obstetrics.* As remarked by the author, "the recent discussion upon puerperal fever at the New York Academy of Medicine demonstrated very forcibly what various opinions are still held upon this subject, and especially as regards its contagious principles, by some of the leading members of the profession in America;" and he adds, "but ideas expressed a few years since in the memorable discussion of the New York Obstetrical Society show that in that country the subject is considered from still more widely divergent standpoints." Dr. Lomer disclaims any attempt at solving the various questions involved, but aims only at collecting and presenting facts regarding the relationship between micro-organisms and puerperal fever. The author first relates "Facts derived from Pathological Anatomy." In this part of the paper, the observations of Mayerhofer, Waldeyer, Orth, Wolff, Ehrlich, Heiberg, Klebs, Litten, Pasteur, Recklinghausen, Steurer and Frænkel are mentioned, and then the author describes in detail microscopical observations made during last winter on three cases of metria occurring at the University Polyclinic connected with the Woman's Hospital in

Berlin. The following is a *resumé* of the facts from pathological anatomy collected by the author:

"I. The chain-like micrococci have frequently been found both in the exudations and in the organs of patients having died of puerperal fever.

II. All observers have noticed the same characteristic variety.

III. Different species of them have hitherto never been described.

IV. It seems as though all who sought for them have been able to find them in every case.

V. More recent researches have shown that, besides this chain-like micrococcus, other micro-organisms—*i.e.*, bacteria—can be found in puerperal fever."

Facts derived from the cultivation of micrococci:—Coze and Feltz, in 1869, attempted to cultivate the blood from puerperal patients in sugar-water. Their results were negative. Orth found that the chain-like micrococci could be kept quite a length of time without change of character, and without the appearance of resultant bacteria. Pasteur's experiments show the possibility of cultivating germs from patients suffering with puerperal fever, and show that not only can these germs be found in such patients, but that when puerperal fever, as such, does not exist, they cannot be found. These observations are of great interest and importance. It was the chain-like micrococci that Pasteur found as a result of these cultivations. Experiments in this direction have been recently made, and are still continued, by Prof. Schröder's request, at the Imperial Health Bureau, under the supervision of Dr. Struck, the director of the institution.

The author next relates facts derived from experiments upon animals. Then the known facts with reference to the relations of scarlet fever, diphtheria, erysipelas and pyæmia, to puerperal fever are given. Our space will not permit of my giving in greater detail the many interesting and important facts (including a number of experiments by Dr. Jovanovic, of the Imperial Health Bureau, on material furnished by Prof. Schröder's clinic.) I append Dr. Lomer's summary of conclusions:

1. Of all micro-organisms found in puerperal-fever, the chain-

like micrococci seem to be those to which we should especially direct our attention, and to which we should attach the greatest importance.

2. When in any case of puerperal fever their presence has been detected in the exudations, they have also been found in the deeper organs.

3. They have been found in erysipelas, scarlet fever, diphtheria, and puerperal fever, and in each possess the same form, and show the same disposition towards fertilizing fluids and coloring matters.

4. Although it is very probable that different varieties do exist among these diseases, we, as yet, have no positive proof of the fact.

5. A differentiation, according to size, is an extremely difficult, perhaps hopeless task, but, according to manner of growth, it may be possible.

5· Vaccination with cultivations of these micrococci from different diseases has proved fatal to animals, but has given no typical or characteristic results.

7. Chain-like micrococci have also been found in infected wounds, and in the blood of pyæmic patients.

8. The pathologico-anatomical investigations thus show that these clinically related diseases (puerperal fever, erysipelas, diphtheria, scarlet fever, and pyæmia) possess similar micro-organisms.

9. Besides the chain-like form, other micro-organisms may be present in puerperal fever—*i.e.*, mixed infection.

10. The presence of these latter in the cadaver does not always prove that they existed in the living body ; on the contrary, they are often the result of post-mortem decomposition.

11. It is probable that the processes of decomposition are sometimes present before death actually takes place ; different varieties of micro-organisms therefore found, for instance, during the death-struggle, may have nothing to do with the cause of the disease.

12. It is, as yet, impossible to classify puerperal fever, as regards course and prognosis, according to the varieties of micro-

organisms found (Doleris), or according to their mode of invasion (Frænkel).

13. In some cases no micro-organisms have been found, but this does not prove that they did not exist.

The Action of Salicylate of Sodium upon the Uterus.—The conclusions of Dr. Balette (*These de Paris*) are that salicylate of sodium, in the ordinary therapeutic dose, calms the pains of dysmenorrhœa, appears to promote menstruation, and causes its reappearance in amenorrhœa. In four cases of pregnant women, in whom the medicine was given in large doses, abortion occurred in two; but no such result was observed in other cases of pregnancy in which the remedy was administered in moderate quantity.—(*Phila. Med. News*).

Phantom Tumors.—It is a well-known fact that in certain women, especially those of hysterical tendency, and most frequently after some illness that necessitates long confinement to bed and invalid habits, or after some mental shock, a general enlargement of the abdomen, simulating a tumour, occurs. This enlargement disappears completely in the condition of anæsthesia, to recur when the latter condition passes off. The condition has been called "phantom tumour." A satisfactory explanation of the cause of these tumours and their disappearance under anæsthetics has not yet been given. Local contraction of the abdominal muscles may produce a partial swelling, but not the general enlargement characteristic of the condition in question. Neither is Ebstein's explanation to be regarded as entirely satisfactory. According to this writer, it is due to a paralysis of the pyloric sphincter, which permits of the passage of the air gulped down to the stomach in large quantities passing without hindrance to the intestines, and so causing a general distension of the abdomen. To accept such an explanation, one must admit that, in the condition of anæsthesia, simultaneously with the subsidence of the abdominal enlargement, large quanties of air are suddenly evacuated, and that, towards the end of the anæsthesia, air is again swallowed in large quantities. To say the least, this is exceedingly improbable.

Krukenberg, in an article based on a carefully reported typi-

cal case published in the *Archiv f. Gyn.*, Bd. XXIII, Hft. 1, advances a new and, as it seems to me, much more rational explanation than any hitherto proposed. In this he is assisted by observations of Duchenne and H. Meyer on the form of the lumbar portion of the spinal column, and of Schatz on intra-abdominal pressure. The patient, a virgin of 24, had menstruated regularly since her 18th year. The periods lasted two days, and were very painful. In the spring of 1883, the menses ceased altogether. Since January, 1880, till her admission (Dec. 15, 1883) to the clinic, she had suffered from hysterical convulsions—at first infrequent, but almost daily during the last two years. During the same period she had suffered from vomiting, which, of late, had occurred after almost every meal. On 28th Feb., 1880, two days after a menstrual period, she was seized with symptoms of pelvic inflammation. Although apparently not severe, the patient kept her bed in consequence for 14 months continuously. From April, 1881, till December, 1882, she was out of bed for a few hours daily. Up to this date she had been taking morphia daily. During and after the inflammation there had been enlargement of the abdomen. Since she began to leave her bed, but especially since she had been able to be up all day long, a constantly increasing enlargement of the belly had existed. She was taken to the Clinic on account of the spasms, vomiting and suspected ovarian tumor. She was badly nourished and anæmic. In the walking, standing, and lying positions there was equally great protrusion of the abdominal walls. This was most marked in the lower part. Nowhere was there either dullness on percussion or circumscribed hardness. The tense abdominal walls did not permit of satisfactory examination, so anæsthesia was induced. The patient was placed in bed in the horizontal position. As soon as the anæsthesia was complete, the swelling of the belly completely disappeared, and through the now perfectly lax abdominal walls the vertebræ and pelvis could be clearly felt. The virginal genitals were normal. Remains of the previous pelvic peritonitis could be felt in the form of a thickening between the uterus and left ovary. As soon as the patient had recovered from the anæsthesia, the en-

largement of the abdomen returned. Subsequently the patient was examined more carefully in the standing position. The enlargement of the abdomen existed as before. The thoracic part of the spinal column was arched back, while, on the other hand, the lumbar portion displayed marked lordosis; the pelvic inclination very slight; the posterior surface of the sacrum nearly perpendicular; the lower extremities extended, but the ankle joint flexed. These conditions are induced, as is well known, to maintain an equilibrium when the abdomen is distended by any abnormal contents. In the absence of any such, the supposition was justifiable that the deformity could not be the result of the great distension of the abdomen, but that both were the result of a common cause, or that the first was the cause of the last. In fact the condition of the spine just described is produced when we aim at producing distension of the abdomen, and in conditions other than those of abnormal contents in the abdomen; especially in the condition of muscular weakness of convalescents. Duchenne found this deformity of the spine in paralysis of the erector spine in a case of progressive muscular atrophy, and also in a case of paralysis of the abdominal muscles from the same disease. Krukenberg believes that in the case just detailed there can be no doubt that the deformity of the spine was the result of weakness of the spinal muscles produced by long confinement to bed. There was no evidence of partial paralysis of spinal or abdominal muscles, as in Duchenne's cases. Now Schatz (*Arch. f. Gyn.*, Bd. IV., s. 193) has shown that when this condition of the spine exists, an increase of intra-abdominal pressure is produced. The increase thus produced is equal to the difference between a column of water 28 cm. and one of 50 cm. in height. To this increase of pressure the atrophic abdominal muscles must yield, and so the enlargement of the abdomen is produced. In the case under consideration, there was the remarkable circumstance that the lumbar lordosis persisted in the lying position. The diminished abdominal space in the lying position compensated for the similarly diminished intra-abdominal pressure, and so the abdominal protrusion persisted; but in anæsthenia, the abdomen became flaccid and—

proof of the correctness of the explanation—the lordosis completely disappeared. On the passing away of the anæsthesia the previous conditions returned. Another experiment without anæsthesia proved the correctness of the theory. With the patient lying on her back, the knees were grasped, and so the lower part of the spine raised from the bed. The lordosis being thus obliterated, the phantom tumor disappeared. The patient could then with effort lie for some time without lordosis, but the position was painful, and after a few minutes the previous position was resumed. A fortnight later, after repeated attempts of the kind described, the patient could lie for the greater part of the day with flaccid abdomen, and finally this became the permanent condition. It was much more difficult, as may be easily understood, for the patient to stand without lordosis, but with the help of a laced supporting corset or bandage about the pelvis, this was also overcome. The hysterical spasms and vomiting soon ceased.

Why the lordosis persisted in the lying position of the patient is not very clear. As the author says, it may, at all events, be considered certain that it was not due to any acquired accommodative change of form of the passive structures—the bones and ligaments—else anæsthesia could have had no influence on the conditions. It was much more probably the muscles of the spine that were concerned. It is well known that a muscle whose points of attachment are approximated gradually becomes shortened. This must have been the condition of the spinal muscle. Perhaps the hysteria had something to do with it. But this shortening must not be regarded in the light of an unyielding contracture ; else the effect of anæsthesia upon the muscles must have been *nil*, which was not the case.

The author's explanation of the mode of causation of the tumour in this case and its disappearance under a næsthesia is, it will be observed, based on simple mechanical relations. Whether or not the earlier observed cases of phantom-tumour were produced in this way cannot now be decided, but it is highly probable that such was the case, when the whole abdomen was enlarged. In Spencer Wells' photographic illustrations of his

case, the important point of persistence of lordosis in the lying position cannot be determined, as the patient is in a half-sitting position, and the clothing is so arranged as to conceal the loins.

Notes of Two Hundred and Thirty-one Cases of Operation for Laceration of the Cervix Uteri.—This was the title of Dr. Thaddeus A. Reamy's (Cincinnati) address as chairman of the section of Obstetrics at the meeting of the American Medical Association held at Washington in May last. The author's first operation was done in February, 1874. No fatal result in the whole list. In six cases the operation was followed by perimetritis, parametritis or peritonitis. All finally recovered perfectly. Of the 231 cases, in 170 the laceration was bilateral, in 38 unilateral. Of these unilateral, 23 were on the left side and 15 on the right. Sixteen cases were stellate. In five cases there were lacerations of the posterior lip only; in two, of the anterior lip only. In 80 cases the laceration was extensive. In 15 of these it extended to the cervico-vaginal junction on both sides. In three cases the rent extended to the internal os. In one of these the vaginal wall was also extensively lacerated: the peritoneal cavity had probably been opened, followed by protracted cellulitis. This patient was a helpless invalid between the date of the injury and the operation. On one side it required 12 sutures to close the cervical and vaginal rent. Perfect success followed the operation; the patient was restored to robust health within six months. In 167 cases there was perineal laceration to an extent that left deformity. In 26 cases he operated on perineum and cervix at the same sitting. He does not hesitate to curette the uterus at the same sitting as the operation on the cervix, if it be deemed necessary, and thinks it lessens the danger of inflammation following the use of the curette. He believes strongly in the efficacy of free bleeding from the denuded surface as a means for promoting the involution of the uterus. To this latter end thorough denudation and the cutting out of all cicatricial tissue are important. As regards the kind of labor in the cases of laceration, it could not be determined with certainty except in a few cases. In 40 cases, the forceps had been used; two were craniotomy cases

and two version. He believes that early rupture of the membranes and attempts at forcible dilatation of the cervix by the fingers of the accoucheur or midwife, and the improper use of ergot, are far more fruitful sources of laceration of the cervix than the forceps. In Cincinnati 70 per cent. of labor cases are attended by midwifes, mostly ignorant and unskilful. He admits, however, that the accident may occur in the hands of the most eminent and careful accoucheur. The importance of shielding the accoucheur from unjust censure by the patient or her friends is justly dwelt upon. The gynæcologist should voluntarily declare the unavoidable occurrence of these injuries in the great majority of cases. Dr. Reamy firmly believes in the strong predisposition to cancer in an unhealed laceration, and, in common with many eminent gynæcologists, he finds in this fact a strong argument in favor of trachelorraphy. In over 300 cases of cancer of the cervix of which he has notes, only one occurred in a virgin, and only 10 in married women in whose cases he could obtain no evidences of abortion or child-bearing. In only two of his cases did the author fail in getting union. In one of these he used catgut, and in the other the sutures were not drawn tight enough. In both cases perfect success followed subsequent operation.

The points in the author's mode of operation which are worthy of note seem to be the following:—He draws the uterus down as little as possible, especially if cellulitis have existed. He uses a nearly half circle needle with a very sharp point, and Chinese silk as the material for sutures. He prefers silk to wire, because it can be more accurately adjusted and may be left in from 15 to 30 days without cutting out. He washes out the cervical canal with a recurrent flow syringe at the close of the operation to remove any blood that may have found its way there during closure of the sutures. He directs the nurse to wash out the vagina with warm carbolized water within an hour after the operation. The vagina is not again syringed till the sixth day, and then daily till the patient is dismissed.—*Philadelphia Medical Times.*

The Question as to the Importance of Flexions and Displacements of the Uterus.—This is the title of a paper by Dr. Graily

Hewitt, of Londou, appearing in the *Lancet* for June 7th, 14th and 21st, 1884. The paper is apparently called forth by recent papers of Drs. Vedeler of Christiana, and Herman of London. The opinions of these two gentlemen, as a result of their observation, are, in general terms, that flexions of the uterus are much more common than is generally supposed, and that they often exist in the absence of symptoms that can be traced to the uterus as their source.

Dr. Graily Hewitt, as is well known, has been a life-long and consistent advocate of the doctrine that the deformities (flexions) and displacements of the uterus are a fruitful source of female symptoms. Without entering the arena of discussion on this much debated question, my own experience leads me to subscribe to most of the author's statements, and especially to that in which he formulates the non-recognition by many physicians, of the uterine origin of certain common symptoms, such as headache, nausea and vomiting, hysteria, leucorrhœa, dyspareunia, not to speak of marked pain or discomfort in the pelvic or lumbar region. The author embodies the result of his experience and observation in the following propositions:—1. "The uterus best performs its functions when its shape closely approximates to what has been termed the normal shape, and when it occupies its normal position in the pelvis. 2. Alterations to any material degree in the shape of the uterus are liable to give rise to complaints on the part of the patient, and not unfrequently occasion severe symptoms. 3. These alterations in shape, coupled as they frequently are with considerable variations in the position of the uterus, are very frequently associated with altered conditions of the tissues of the cervix or body of the uterus. When so accompanied with tissue changes they rarely fail to occasion marked symptoms. 4. It is found that the symptoms or complaints of patients presenting these associated conditions, (flexion plus tissue-change) are markedly relieved by adopting such procedures as are calculated to diminish the degree of the flexion, and thus to restore the uterus more or less completely to its normal shape and position. Further, it is found that the tissue-alterations are favorably influenced to a marked degree by restoration of the uterus to its proper shape."

The author concludes his paper in the following words:—"I would remark that there appears to me to be two principal reasons why the importance of uterine flexions as factors in uterine disease is doubted by some and disbelieved by others: 1. That the complaints made by women are too often treated as fanciful, whereas what is really wanting is a discriminative analysis of such complaints. 2. A want of recognition of the influence of defective nutrition in producing such alterations in the tissues of the uterus as predispose to, or constitute the first stages of, serious and troublesome disease of this organ."

Five Cases of Extra-Uterine Pregnancy operated upon at the Time of Rupture, by Lawson Tait, Esq., F.R.C.S.—Mr. Tait has seen some five or six-and-twenty cases of rupture of extra-uterine pregnancy, and, having been encouraged by his success in the surgery of other abdominal diseases, resolved to try what surgery could do in these cases.

For this treatment, of course, the main difficulty is in the diagnosis. but this is a small matter to Mr. Tait, who has now completely adopted the principle of always opening the abdominal cavity when he finds a patient in danger with abdominal symptoms. The diagnosis is not, perhaps, so difficult after all. In many cases the existence of pregnancy has been suspected before the rupture occurred. In the majority of these cases there is a misleading feature; the patient has never been pregnant, or has not been so for years, so that arrest of menstruation does not attract particular attention. If, however, it be found that the patient has been eight weeks or more without a period, that there is a pelvic mass on one side of the uterus and fixing it, and if sudden and severe symptoms of pelvic trouble and hemorrhage come on, the rupture of a tubal pregnancy may be suspected, and if an operation is to be done,—and it clearly ought to be done—it must be done without delay. So says Mr. Tait, and adds: "Early interference is clearly a chief element of success in modern abdominal surgery." He appends the report of five cases thus treated—abdominal section, ligature of the tube and its removal, and then careful toilette of the peritoneum—before closing." Of the five, four recovered.—*British Medical Journal,* June 28, 1884.

Correspondence.

LETTER FROM LEIPZIG.

(From a Special Correspondent.)

Leipzig is justly regarded as one of the great medical centres of Europe, and in the German Empire rivals Berlin in the renown of her medical professors and in the number of students which throng the lecture halls. With the great development of Berlin in the past twenty-five years, its medical school has assumed proportions and importance which place it somewhat in advance of that of the Saxon capital. The philosophical, legal and theological faculties of the Universities attract large numbers of foreigners, among whom are at present several Canadians.

As a city, Leipzig is large enough to offer excellent clinical advantages; and St. Jacob's Hospital, with its "barracks," as the pavillions are called, contains abundant "material" in all departments. The general university buildings are in the middle of the city, and are plain and unpretentious. The medical and scientific departments are in the outskirts, and occupy a long street well named *Liebig*. Beginning at the central end, one passes in the following order the large isolated buildings devoted to the various subjects:—Anatomical, Physiological, Physical, Chemical, Zoological and Agricultural Institutes, the Eye Hospital, the Deaf and Dumb Institute, the St. Jacob's Hospital, the Pathological Institute, the Veterinary School, the Botanical School, and, most distant of all, the Insane Asylum. The Institutes are usually three-story buildings, the lower flat devoted to teaching purposes, while the upper affords excellent accommodation for the professor and often one or two members of his staff.

The Pathological Institute is conducted very much on the model of Virchow's, and is in charge of Professor Cohnheim, with whom are associated Professor Weigert and Privat-Docent Huber. As, I dare say, most of your readers have heard, Prof. Cohnheim is seriously ill, and there is, unfortunately, no prospect of his recovery, as he has chronic Bright's disease (gouty). The loss will be most serious. As an experimental pathologist, he has no rival in Europe, and his lectures on General Pathology,

a second edition of which was issued last year, show a grasp of the principles of disease not inferior to his great master, Virchow, and a clearness of exposition quite as great. It is a pity the work has not been translated. The charge of the laboratory is virtually with Professor Weigert, to whom medicine is under a deep debt of obligation for the introduction of the use of aniline dyes in histological work, as well as for the unravelling of many knots in pathological histology. He is a model of industry,—first at work in the morning, last to leave at night,—extremely affable and attentive, qualities which go so far to make one's stay in a laboratory comfortable and agreeable. I know of no place where a man can better work at pathological histology. Dr. Huber, who does a large part of the instruction, is a most painstaking and skillful teacher. The number of autopsies is not so great as at the Berlin Institute, but one can see at least two or three a day.

The medical clinic is in charge of Professor Wagner, who for many years held the chair of Pathology, and succeeded Prof. Wunderlich in the chair of Clinical Medicine in 1877. He is well known to us as the author of the valuable work on General Pathology (Wm. Wood & Co.), and for many years edited the *Archiv der Heilkunde*. As a teacher of clinical medicine he stands in the very front rank. His method and manner remind one of Traube, which, in my opinion, is one of the highest compliments to pay a teacher. From 9.45 to 11 a.m. instruction is given upon cases brought into the theatre, usually three or four each day. At the beginning of the lecture, new cases are given out to the students, who go to the wards and make out the history, &c., and then, when one of their cases is brought before the class, the student whose case it is goes into the arena and states the prominent features, and makes the diagnosis. The physical examination is made by the student, and then a general summary is given to the class, with the necessary explanatory remarks. We all know how apt this method is—in some hands—to be dry and wearisome; details are obtained slowly by the student, and I have seen a class thoroughly tired, the professor irritated, and half an hour consumed in getting primary facts.

Prof. Wagner seems to get the details quickly, and the students appeared to me to be very much brighter than those at Berlin. To students coming to Germany for post-graduate study, I would most strongly recommend them to take a semester at this clinic. For the general practice which nine-tenths of doctors ultimately engage in, it is worth any dozen special courses that I know of. Among many interesting cases which I saw at this clinic, I will mention one—a very rare form of hysterical breathing. On June 30th, a girl, aged 15, was brought into the clinic, and long before the attendants had wheeled the bed into the theatre we could hear extraordinary cries succeeding each other with great regularity, and resembling somewhat the baying of an animal. When the bed was brought in, upon it was a slightly built, emaciated girl, sitting upright, and breathing in a noisy and remarkable manner, most distressing to witness and to hear. There was first a loud crying inspiration, preceded by three or four jerking attempts, also noisy, and then came a deep-toned expiration, the sound evidently produced by the vibrations of the soft palate. There appeared to be urgent dyspnœa, and the countenance of the child was expressive of the deepest misery. These respirations followed each other with great regularity, and had persisted since the night of the 22nd of May, when she woke up and began this form of breathing, which had never since ceased except during sleep. She had been hard worked at school, and had had mental excitement in preparation for her first communion. There was no disease of heart or lungs, and examination of the throat showed only the vibrations of the palate. Professor Wagner placed his fingers in the mouth and pressed down the jaw, and at the same time commanded her firmly to try and breathe quietly, which she did in a few minutes, and took water and told her name. In remarking on the case, he said that it could not be brought into the category of any known form of dyspnœa, and was probably an unusual manifestation of hysteria. From the loss of sleep and inability to take food the child had become greatly emaciated.

Perhaps the most notable figure in medical Leipzig is Prof. Ludwig, Director of the Physiological Institute, and the Nestor

of German physiologists. Indeed he has a higher claim than this, for when the history of experimental physiology shall be written, his name will stand pre-eminent with those of Magendie and Claude Bernard. He is now an old man, with bodily vigor somewhat abated, but, mentally, fresh and suggestive as ever. He has the honor of having trained a larger number of physiologists than any other living teacher ; his pupils are scattered the world over, and there is scarcely a worker of note in Europe—bar France—who has not spent some time in his laboratory. Two circumstances have combined to this result—his extremely attractive and sympathetic nature, which has made of each pupil, not only a co-worker, but a life-long friend, and then his extremely suggestive mind, always ready to broach problems for experimental solution, and always able to assist in devising the methods and apparatus necessary for the carrying out of any given research. The laboratory is extremely well equipped, with histological and chemical departments, as well as the special physiological, which occupies the main portion. There are eight or ten men working at different subjects, some of extreme complexity. Thus, Dr. Lombard of Boston is endeavoring to work out the problem of the co-ordination of muscle, and to get the order of contraction, etc., has devised a most complicated piece of apparatus, by means of which he can take simultaneous tracings of the contraction of each muscle in the frog's leg. I was struck with one remark which Professor Ludwig made in speaking of English physiology, viz., the unfortunate influence which it had had in practical medicine and surgery, arising from the fact that its exponents and representatives had, in so many instances, drifted off into these branches, and he instanced Todd, Bowman, Beale and Lister. The association between physiology and practical medicine is much less close in Germany, where it is studied as a separate science in these large institutes, which offer for special students exceptional facilities, but the rank and file are not, I believe, so well instructed in their physiological work as with us in England.

It is very hard to adjust the two great functions of a University, or a part of it, as represented, say, by such an Institute.

The work which shall advance the science, which brings renown to the professor and to the University, is the most attractive, and in German laboratories occupies the chief time of the director. This function is specially exercised, and the consequence is that medical literature teems with articles issued from the various laboratories. On the other hand, the teaching function of an Institute is apt to be neglected in the more seductive pursuit of the "bauble reputation."

I was greatly interested in the work of Professor Leuckart's laboratory, and regret that I had not time to see more of it. He is Director of the Zoological Institute, and is known everywhere as the great authority on parasites. Fortunately, he was lecturing on them this semester, and I had the privilege of hearing part of the course. He has the largest helminthological collection in the world, and has specimens sent from all countries for determination. A large number of men are at work in his laboratory, chiefly at comparative anatomy, and I was pleased with the thoroughness which Prof. Leuckart exacted in every bit of work undertaken. My impression is, that for an extremely good biological training, one could not be under a better master.

There is not a fully organized Veterinary School here, but only a department in connection with the Agricultural College, and a professorship of the science, which is held by Dr. Zurn, the well-known joint author, with Kuchenmeister, of an important work on parasites. The arrangement is very similar to that of the Ontario Agricultural College, and in the various State Colleges, where lectures on diseases of animals, etc., are given to the students. Prof. Zurn is, unfortunately, in ill health, but there is considerable activity in his laboratory under his assistant, Dr. Plant. Dr. Zurn is one of the leading authorities on the diseases of birds, on which subject he has just issued a valuable text-book.

I was extremely pleased to make the acquaintance of Prof. Winter, the University Librarian, and for 40 years or more the editor of Schmidt's *Jahrbüch.* Like most editors—medical—of my acquaintance, he has a kindly and a genial nature, and I am indebted to him for many acts of politeness.

W. O.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL.

MEDICAL CASES UNDER THE CARE OF DR. ROSS.

Case of Tubercular Peritonitis—Apparently sudden onset—Pleuritic Effusions—Thoracentesis—Death and Autopsy.

G. C., æt. 17, an under-sized, emaciated, colored lad, admitted January 23rd, 1884, suffering from an attack of acute peritonitis, which had begun suddenly three days before. Previous history revealed nothing beyond some irregularity of the bowels and occasional slight pains in abdomen for about a year, during which time he had been losing some flesh. On admission, prominent features of the case were pain, with deep and superficial tenderness, and tympanites in abdomen, most marked in hypogastrium. Bowels constipated. Temperature 104°; pulse 92, full and soft A soft, blowing systolic murmur at apex; transmitted to left. Lungs normal. Under simple treatment, pain and tenderness became much less, but tympanites persisted to end of case. Temperature fell and remained sub-febrile until February 1st, after which it was very irregular, rising to 102°, 103°, or 104° at night, and usually falling to normal or subnormal in the morning.

Feb. 11*th.*—No pain. Has superficial, but no deep, tenderness about umbilicus. From this time bowels remained regular.

Feb. 28*th.*—Return of pain and tenderness in abdomen. A triangular dull area over front of chest, from left border of sternum, below level of third rib; apex about right nipple.

March 18*th.*—Morning temperature does not descend below 100°. Has dry cough. On examination, pleuritic friction in left axilla. Abdomen distended and hard. 22*nd.*—Friction extended to left base. 30*th.*—A loud friction heard over præcordia, loudest about left nipple; thought to be pericardial.

April 12*th.*—Pericardial friction gone. Pleuritic friction heard over anterior border of left lung. Still a loud friction at left base. Has occasional night sweats. 17*th.*—Effusion into left pleura; friction sound still heard behind. Heart displaced to right of sternum. Loud blowing murmur heard in both inter-

scapular regions. Continued distension of abdomen. No ascites. 27*th.*—Effusion greatly increased ; dullness of entire left chest ; distress of respiration. 30*th.*—Aspirated and ℥xxx of serum removed from left pleura ; great relief to breathing.

May 7*th.*—Fluid reaccumulated ; aspirated and ℥ xvii of serum removed ; breathing again greatly relieved. 19*th.*—Fluid reaccumulated, but caused no dyspnœa. Return of pain and tenderness in abdomen during last few days. Died to-day of exhaustion.

Autopsy.—In abdomen, extensive peritonitis ; abdominal organs and coils of intestines completely glued together. Peritoneum studded with innumerable whitish nodules, the size of small marbles ; to the naked eye strongly resembling secondary carcinoma ; on section, firm and caseous. These nodules, on examination by Dr. Wilkins under the microscope, proved to be of the nature of caseating tubercle. *Thorax*—forty ozs. fluid in left pleural sac. Parietal pleuræ thickened ; on left side, presents numerous small nodules similar to those in peritoneum. On right side, also, a few are seen. Left lung collapsed, completely airless, lies close against vertebral column ; a few small cretaceous bodies, apparently old miliary tubercles, just under visceral pleura ; none in lung substance. Right lung normal. *Pericardium*—Parietal layer firmly adherent to pleura over left lung, from which a few small nodules project out of it as round elevations. Lining membrane smooth ; shows no signs of inflammation. *Heart*—Mitral segments a little opaque ; aortic valves present a few small warty vegetations. Abdominal organs normal. Brain normal.

Remarks.—When this case first came under observation, it presented all the characteristic and typical features of an attack of acute peritonitis. Recognizing the necessity of searching for the exciting cause, this was specially investigated, but without any result. His clinical history, as far as could be learnt, threw no light upon this attack. No symptoms pointed towards any pre-existing disease of the abdominal organs, and, as far as he knew, he had been in his usual health, and had not been losing weight markedly up to the time of the sudden onset of the pain. It was

therefore necessary to await further developments before coming to a decision on this point. The acute attack appeared to subside entirely under appropriate treatment, leaving behind it only vague, uneasy feelings in the abdomen and a slight degree of tenderness. The patient was actually then, for a time, looked upon as a convalescent. This promising, condition, however, was of short duration. Abdominal pains recurred in different regions of the abdomen, new seats of tenderness developed themselves, a remittent type of fever was set up, and gradual emaciation was observed. As this state of things showed itself, we began to realize that the patient was the subject of some grave constitutional affection, and the suspicion of tubercle was fully entertained. We sought repeatedly for evidence of that condition in the lungs, which, if present, would have been strongly corroborative. The physical signs there, however, were uniformly negative. Later on, extensive acute pleurisy occurred, for a long time dry, but ultimately accompanied by considerable serous effusion, for which thoracentesis was twice performed. Long before this occurred, the diagnosis of tubercular peritonitis had been definitely made. It was founded upon the persistence of localized peritoneal inflammations, with marked constitutional derangement and deterioration. In the majority of cases, with such facts before us, the choice lies between tubercle and carcinoma, and, of course, the usual considerations of age and so forth must be applied in any given case to enable the distinction to be made. The absence of ascites is a noticeable feature.

Case of Pernicious Anæmia at advanced age—Improvement under Arsenic—Relapse—Small blood-counting—Death from Asthenia—Autopsy.

W. H., æt. 65, saddler, admitted May 23rd, suffering from dyspnœa on exertion, cough, loss of appetite, and general weakness. Up to about two years ago, had always been healthy; never had ague, rheumatism, or syphilis. In his younger days was a heavy drinker; latterly, moderate. About two years ago he began to feel weak, and to find that his wind was not so good as it used to be; his friends also noticed that he was losing

color and becoming very pale. He entered the Hospital in February, 1883, suffering from dyspnœa on exertion, being quite comfortable when quiet in bed. On any severe exertion he suffered from palpitation and cardiac pain, and occasional fits of dizziness. At this time, and for a month previous, he had also swelling of the feet and ankles during the day, always disappearing at night. Had lost but little flesh. Was markedly anæmic; appetite poor. A soft, blowing basic, systolic murmur was present; no venous hum. Apex beat increased in intensity just under nipple. Blood very pale and watery; red blood-corpuscles to cubic centimetre, 1.150,000; white to red, 1–115. Examined by Dr. Osler and reported thus: "Marked deficiency of red blood-corpuscles, slight relative increase of white; some microcytes, but not very many; not many granular masses of Schultze; a good many large-sized red corpuscles; marked irregularity in the size of the red cells, which is almost enough in itself to diagnose pernicious anæmia; no nucleated red cells seen." *Lungs*—Few crackling râles at both bases. *Liver*—Five inches vertical dullness. *Spleen*—No enlargement. *Eyes*—Few small extravasations in the retina of each eye. He left Hospital in March, general condition much the same; was readmitted Nov. 7th of same year, suffering from same symptoms as before. Had been able to able to work pretty well all the summer till a couple of weeks before admission, when he thought he caught cold. Condition much the same as when in hospital before; a little emaciated. *Blood on admission*—Characters much the same as before; red blood-corpuscles to cubic centimetre, 1.530,000; white to red, 1–300. Improved under Fowler's solution of arsenic. Left hospital in January of this year. Blood thin, better color, and less watery; red blood-corpuscles to cubic centimetre, 2.570,000.

Readmitted May 23rd, suffering as before from dyspnœa on exertion, cardiac pain, palpitation, noises in ears, occasional fits of dizziness, cough, loss of appetite, and general weakness. Since leaving in January last, says he has been able to work at his trade pretty well; breath and appetite fairly good up to about a month ago, when he caught a severe cold, and has been very

ill ever since ; occasional swelling of feet and ankles ; two prolonged attacks of epistaxis the week before admission (no more nose-bleeding up to time of death) ; appetite poor ; tongue very pale and flabby ; bowels constipated. At this time he was somewhat emaciated ; muscles very soft and flabby ; skin has a peculiar sallow, dirty, lemon-yellow tint ; conjunctiva a little yellowish ; mucosæ pale, almost colorless ; is very weak, and can with great difficulty walk across the ward ; is fairly comfortable in bed. Temperature 98° ; pulse 96, regular, but very soft and feeble ; respirations 28. On listening to heart, a harsh blowing systolic murmur is heard, with maximum intensity over sternum, opposite third rib, transmitted up the sternum into vessels of the neck, and also with diminished intensity to the apex, not propagated to left of apex. Moist râles at bases of both lungs. Liver dullness slightly increased. No splenic enlargement. Urine clear, acid ; specific gravity 1012 ; no albumen nor sugar. Blood examined : Very pale, thin and watery ; white corpuscles are relatively a little increased ; red blood corpuscles vary greatly in size and shape, and are very pale, an average of seven countings gives 800,000 to the centimetre ; great many small red cells or microcytes ; no enucleated red blood corpuscles ; no granular masses of Schultze ; white to red as 1–100. Eyes examined by Dr. Buller, and retinal extravasations found in both as before. He rapidly grew weaker, becoming very drowsy and languid, being very delirious and rather noisy the last two nights, wandering somewhat in the day also. He became weaker and weaker, till he died at 8.30 Thursday evening, the 28th. Since admission, the pulse never rose above 100, nor the temperature above 100°.

Autopsy.—Body that of an old man, medium size, fairly nourished. Rigor mortis well marked. Extreme pallor of skin and subcutaneous tissue. *Abdomen*—Omentum, stomach and intestines very pale. *Liver*—Left lobe somewhat enlarged ; surface much puckered ; small cicatrix on upper surface of right lobe ; pale on section ; presents numerous dark red spots, like minute ecchymoses. *Spleen* apparently normal ; good color ; not pale nor enlarged. *Kidneys*—Left extremely pale ; cap-

sule rather adherent; organ cuts firmly; cortex rather diminished in thickness. Great contrast to right kidney, which, except being firm on section, is of a good color and apparently normal. Neither liver nor kidneys give reaction with iodine. *Thorax—Heart:* Over an ounce of fluid in pericardium; large "milky patch" from attrition over right ventricle; on opening heart, a quantity of thin, watery-looking blood escapes from right auricle and ventricle, left empty; no coagulated blood; right heart dilated; left ventricle dilated and hypertrophied; aortic valves competent, but roughened from patches of atheroma, as also is the aorta down to the iliacs; tricuspid orifice considerably dilated; other valves normal. *Lungs*—Left normal; right, pleura adherent throughout, and much thickened; at apex of right lung is a mass of hard, cretaceous matter, the size of a walnut. *Brain*—Pale and a little œdematous. *Retinæ*—Small hemorrhages at periphery. *Bone marrow* is red, like fœtal marrow. Abundance of leucocytes and red corpuscles; no nucleated red cells found.

Remarks.—The advanced age of this patient (65) is to be noted, as it is beyond that when malignant anæmia is to be looked for. The actual enumeration of the red corpuscles by Gowers' Hæmacytometer is remarkable, the cubic centimeter containing once only 1.150,000, and later on, the smallest number I have ever seen, viz., 800,000. Arsenic, in fair doses, lessened the subjective symptoms, and actually increased considerably the proportion of red cells. The improvement, however, was only temporary, relapse soon taking place. This corresponds with what I have seen in other cases of the same kind. The cardiac murmur heard during life was confidently predicted to be of organic origin, and not simply anæmic. The roughened aortic valves and atheromatous aorta proved this to be the case. The only means relied upon for distinction were harshness and propagation to an unusual extent for blood murmurs.

Case of Acute Pneumonia—Hæmoptysis—Early defervescence—Rapid Recovery.

J. W., æt. 30, single, 'longshoreman, came to hospital June

18th, 1884, complaining of pain in left side, with cough and hæmoptysis. Family history indefinite ; no history suggestive of tuberculosis. *Previous history*—Always healthy till 10 years ago, when he had typhoid fever, during the convalescence from which he developed a cough, short and dry, and which, though never very troublesome, has never left him. He says he has never been so strong or fleshy since as before the fever. Has had several attacks of rheumatism during past ten years ; laid up in bed each time. Last November was in the General Hospital for injury to left side of chest, the result of a fall ; had a little hæmoptysis immediately after the fall, with sharp pain in side ; the hospital report says : " No fractured ribs, is a delicate-looking man, gives a phthisical history, but no physical signs." Left hospital cured in three days, and worked steadily up to March last, being all the winter quite as well as before the accident. Had a severe attack of rheumatism in March ; in bed three weeks. After this attack, went to work and felt fairly well up to three weeks ago, when, from exposure to cold and wet, he had a severe chill, followed by dry cough, with pain in left side, aggravated by breathing or coughing. This cough much worse towards morning ; came on in paroxysms, obliging him to sit up in bed, and frequently set up vomiting. No hæmoptysis whatever since injury. Has felt flushed and feverish in the evenings, preceded by chilly sensations, with severe sweats at night for the past three weeks ; never had these sweats before. Appetite has been failing rapidly during this time, also rapid emaciation. Present attack began on the 15th June, three days before admission, patient having worked up to Saturday night, the 14th. Felt as well as usual Sunday morning (15th). Commenced with a burning heat in the head, dizziness, and sense of great weakness ; slept none that night, the symptoms continuing unabated ; the cough also now becoming very troublesome. Next morning, walked down stairs, felt very dizzy, and during a fit of coughing expectorated about a pint of dark frothy blood ; no vomiting. Had a little hæmoptysis yesterday morning. The pain in side and cough much worse last two days, with but very little expectoration.

On admission.—Patient is a medium-sized, dark-complexioned man, very much emaciated ; bony parts of joints, ribs, clavicles, etc., very prominent. Muscles flabby ; skin warm and moist ; no incurvation of nails or clubbing of fingers ; feels, as he says himself, very weak. Voice is very weak, low and hoarse ; can with difficulty speak above a whisper : this trouble came on yesterday ; throat does not feel sore. Cough very distressing, paroxysmal, very scanty, and very viscid ; muco-purulent expectoration streaked with blood, some sputa being rusty. A little frontal headache. Appetite poor. Tongue moist, with slight brown fur. Some vomiting after fit of coughing. Bowels a little constipated. Temperature 102° ; pulse 96, soft and weak ; respirations 42, ratio 1:2⅓.

Physical signs.—Chest very long and narrow ; clavicles very prominent, hollow above and below both ; expansion very deficient on both sides, more marked on left. Base of left lung very dull on percussion up to angle of scapula ; also lower half of axillary region. Over the dull area the breathing is harsh and blowing, with a few sub-crepitant râles. Mild bronchophony in same area. Lungs otherwise normal ; apices clear. Heart : marked pulmonary accentuation ; otherwise normal. Urine high-colored, sp. gr. 1022 ; slight deposit of urates ; no albumen or sugar ; chlorides present.

Patient was put on Liq. Ammon. Acet. ʒii ; Ammon. Mur. grs. v 4 q.h. ; ʒiv whiskey per diem, with mustard, &c., to the side. The day after admission, being the fifth day of the acute trouble, the temperature and respirations fell, and patient was very much better. All his symptoms continued to improve very rapidly, his voice becoming strong, cough gradually disappearing, and his appetite returning, the physical signs above-mentioned rapidly disappearing, till, on the 27th June, ten days after admission, he left the hospital perfectly cured, and with the base of his left lung quite clear, breathing only slightly feeble, and unaccompanied by any adventitious sounds. Temperature 97° ; pulse 64, strong and full ; respirations 22.

Remarks.—This case presented, as a feature of considerable interest, a copious hæmoptysis amongst the initial symptoms of

an acute lobar pneumonia. This is of very rare occurrence—so rare that its presence is very apt to embarrass the diagnosis at that stage. It is hardly mentioned by the standard writers. This is the second case I have met with where subsequent observation of the patient left no room for doubt as to the absence of any other possible causative lesion. This patient's previous history was specially suggestive of phthisis, but in spite of this, the diagnosis—an acute lobar pneumonia, non-phthisical—was fully sustained by subsequent events. Complete defervescence occurred on the evening of the fifth day, decidedly earlier than is customary.

Case of Acute Pleurisy—Effusion—Remittent Fever—Prolonged Illness—Recovery.

E. S., æt. 26, farmer, admitted 23rd May, 1884, complained of pain in the right chest, with shortness of breath and cough. Patient had a sister who died of some acute pulmonary trouble (phthisis ?) ; family history otherwise good. Up to six weeks ago he was perfectly healthy. At this time he was attacked with a severe, sharp, shooting pain in his right mammary and axillary regions ; much aggravated by a full breath or by coughing. At the same time he began to cough, but had no expectoration. This acute pain lasted for one week, and since that time till admission he has suffered from some pain in the side ; dry, hacking cough, shortness of breath on exertion, with great loss of flesh and strength.

On admission he is found to be a very tall (6ft. 2in.), large-framed man, considerably emaciated, pale and anæmic, unfit for any exertion on account of shortness of breath, and troubled with a short, dry cough. *Physical Signs in Chest*—Chest somewhat long and narrow, but well-formed ; the intercostal spaces of right side are noticed to be somewhat obliterated, and expansion is markedly deficient on this side. Heart apex seen and felt in 5th space (left) 1 inch outside the nipple line. *Measurement*—Right side, 18in. ; expansion, $\frac{3}{8}$in. Left side, 17$\frac{1}{2}$in. : expansion, 1$\frac{1}{2}$in. On right side whole front is very dull below the 3rd rib ; the lower part of this area flat, lateral

regions dull; lower half flat. Behind, very dull below angle of scapula, base flat: clear note over left lung and both apices. Respirations are feeble, but vesicular over the dull areas; almost absent at the base of right lung. Though weak, the breathing is clear and vesicular in right apex. No râles heard anywhere. *Voice*—Fremitus diminished over dull area, absent at base. Resonance diminished and feeble at base; in places, modified bronchophony, almost egophony. Heart sounds normal. Ordered Potass. Iodid. grs. x; Tr. Calumb. 3ss, t.i.d., with Iodine lotions to side.

Up to 23rd June, one month after admission, the temperature was very remittent, with evening elevations to from 100° to 103½°, and morning remissions to from 98½° to 96°. Since that date his temperature never rose above 99½°, and he has rapidly gained in weight and strength.

June 5th.—Expectoration (scanty and glairy) was examined for lung tissue and tubercle bacillus with negative results. Physical examination at this time shows gradually diminishing dullness, breath sounds louder, but some moist râles on inspiration, prolonged and somewhat blowing respiration over dull area. A loud-rubbing friction is heard in lower part of right infraclavicular region and upper part of right axilla. Left lung: Clear note, breathing nowhere strong and vesicular; no râles. Ordered Emp. Canth. 4 × 4 in right infra-clavicular region.

June 15th.—Loud friction still heard behind, below 6th rib, in right axilla and in right infra-clavicular region. Breathing stronger, still somewhat tubular about right mammary region. No moist râles anywhere.

June 23rd.—General condition about the same; occasional night sweats. Lungs: percussion about the same, but better note in 3rd space in front; breathing stronger, still somewhat blowing behind; no râles; loud friction still heard in right axilla.

July 16th.—Discharged. Temperature normal since 23rd June; rapid improvement, with gain in flesh and strength; weighed 176 lbs. on June 28th, 182 lbs. on July 10th. Friction still heard in right chest; percussion somewhat clearer, but

still dull at base of lung; breathing somewhat harsh in right infra-clavicular region ; no râles anywhere. Taking Ol. Morrhuæ 3ij. t.i.d.

Remarks—The case of E. S. was instructive, inasmuch as the symptoms were well calculated to mislead. E. S. was referred to me by a medical friend in the country, from whom I had some facts of his patient's history. These had been such as to lead to a strong suspicion of the existence of tuberculosis. The persistence of the cough and the deterioration of the general health lent the chief support to this view. From a careful enquiry into the facts as given above in elucidation of the physical signs as then detailed, I could not share this view. The diagnosis was acute pleurisy with plastic and perhaps moderate serous effusion and an absence of tubercular deposits. In accordance with this view a very hopeful prognosis was given. After a short time, however, our patient failed markedly, he emaciated and became affected with a very decidedly remittent character of fever during several weeks ; he also sweated at night. Repeated physical examination, however, failed to show any evidence of pulmonary deposits. At this time the sputa were examined for the bacilli of tubercle ; none were found. If this means of diagnosis is to be of real practical service, such doubtful cases as this must furnish the opportunities. So far it negatively supported the original opinion. The progress of the report shows how, shortly after, loud, dry frictions occurred, the temperature fell to normal and the patient returned to his home convalescent, physical signs of thickened pleura alone remaining.

Reviews and Notices of Books.

Hooper's Physician's Vade Mecum: a Manual of the Principles and Practice of Physic, with an outline of General Pathology, Therapeutics, and Hygiene. Tenth edition. Revised by WILLIAM AUGUSTUS GUY, M.B., Cantab, F.R.S., F.R.C.P., Consulting Physician to King's College Hospital, &c., and JOHN HARLEY, M.D., Lond., F.L.S., F.R.C.P., Physician to St. Thomas' Hospital, &c. Vol. I. New York: Wm. Wood & Co.

An old friend in a new guise. The original text is maintained throughout, but numerous important additions have been made, so that it shall include many subjects not developed at the time of the first edition (1823). It appears to have been for a long time the only work of the kind extant, and even yet there is ample scope for its usefulness, spite of the numerous handbooks of practical medicine recently introduced to the profession. "In making extensive changes and additions to this edition, the original intentions of the authors, to make this work practically useful to the student and practitioner, have been strictly adhered to, and we believe it will now be found the most comprehensive work of the kind heretofore published in this country." That is the statement made in the revisers' preface, and we fully concur therein.

Practical Manual of Obstetrics.—By DR. E. VERRIER, Lecturer on Obstetrics in the Faculty of Medicine of Paris. Fourth edition, enlarged and revised. One hundred and five illustrations. First American edition, by EDWARD L. PARTRIDGE, M.D., Professor of Obstetrics in the New York Post-graduate Medical School. New York: W. Wood & Co.

This work by a French author has been added to the standard library. It is no doubt useful to every medical practitioner to have a knowledge of the practice of the several branches of our Art in other countries besides his own. No doubt we have set forth there the teachings which have, through experience, commended themselves to the French accoucheurs, and which are

therefore to be received with all due respect. In many particulars, however, these will be found to differ considerably from the rules enunciated by the most recent English and American authorities. It is not therefore to be supposed that we should specially recommend Dr. Verrier's book as a guide or text-book, though a comparison of the points of variance between it and our own manuals will afford instruction and ample room for thought. Thus, in removal of the placenta, the old plan of making traction on the cord is recommended, the expression, "treatment of Credé," being condemned. The latter is said to be only admissible "when the cord has ruptured, or is very delicate and friable, or, again, when we suspect an abnormal insertion." Now, there is, certainly, difference of opinion on this subject, but we think the great majority of accoucheurs are inclined to favor the Credé method over the old expectant plan or traction upon the cord. In Chap. VII, numerous directions are given as to the care of the parturient woman. Amongst other things, great stress is laid upon the necessity for quietude and avoidance of excitement—*e.g.*, "the mother should know nothing about the baptism, if this ceremony occurs a few days following labor." "The bed is to be made the third day following delivery, and then is not to be touched until after the fever." Attention is also to be directed to suitable clothing, and she must not go out too soon. "Science records numerous examples of puerperal fever contracted from neglect of these precautions." Now, we cannot think such teaching calculated to do much good. What is meant by "after the fever," in the above quotation, is very indefinite, and, with reference to puerperal fever and its causation, the modern view of its dependence upon a true and specific living poison is one of the most important deductions from bacteriology. If this be true, how can it result from such causes as those mentioned. Exposure to a draught of air, catching cold in some way, are often made scapegoats and shouldered with the responsibility of producing puerperal fever, but it is a dangerous doctrine to teach. Though we have felt bound to point out the existence of such-like peculiarities in this manual, we have not failed to admire the admirably terse manner of its composi-

tion, the completeness with which the entire subject is handled in small space, and make no doubt that it gives a fair representation of the practice of the French schools. It will no doubt be much appreciated by the subscribers of the Library and the general medical public.

Hand-book for the Dominion of Canada, prepared for the Meeting of the British Association for the Advancement of Science at Montreal, 1884. By S. E. Dawson, one of the Local Secretaries of the Association. Montreal: Dawson Bros.

We have been favored with a copy of this excellent guide to this country and hand-book of valuable information to visitors. It contains sketches of each of the provinces and their leading cities, all written in that pleasant style for which the author is so well-known. We advise all our Montreal friends to draw the attention of strangers to the existence of this excellent manual, which has been prepared for their express benefit. Even Canadians will be surprised, in its perusal, to find how many things they may themselves learn about their own country. It is accompanied by excellent maps of the entire Dominion, showing all the railway and steamboat routes.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 9th, 1884.

T. A. Rodger, M.D., President, in the Chair.

The following pathological specimens were exhibited :—

Aneurism of the descending Aorta—Erosion of Vertebræ—Pressure on Left Bronchus—Carnified Left Lung. Dr. Geo. Ross exhibited the specimen and narrated the case.

The specimen consisted of a large aneurismal sac occupying the descending portion of the thoracic aorta. The posterior wall of the pouch had been absorbed, and laid bare the bodies of several dorsal vertebræ, which were also considerably eroded. The left bronchus had been compressed, and the corresponding

lung was airless and carnified. The aortic segments presented a sclerosed and contracted appearance, and were inefficient. The lining membrane of the aortic arch extensively atheromatous.

The history of the case began with an attack of acute left-sided pleurisy more than two years ago, for which he had been attended by Dr. Ross. Physical examination at that time showed only the usual signs of pleuritic inflammation, and of incompetency of aortic valves, with consecutive changes in the left side of the heart. Aneurism was not suspected. A year later he consulted Dr. Blackader, who referred him to Dr. Ross once more, he believing that further organic disease existed. After recovering from his pleurisy, the patient had continued to suffer from persistent pain in the left side of the chest, and shortness of breath had become aggravated. Physical signs were : dullness over whole left lung, and respiratory sounds distant and feeble over same area. Double basic cardiac murmur. Tracheal traction evident. Aortic aneurism diagnosticated. Subsequently there were developed well-marked neuralgia of 5th, 6th and 7th intercostal nerves, which could be traced out by exquisite superficial tenderness ; also a remarkably strong, heaving pulsation at the xyphoid and neighboring parts, apparently lifting the heart itself against the chest. The addition of these signs allowed the aneurism to be placed with certainty in the descending part of the aorta. He died with symptoms of bronchitis and increasing asphyxia.

Cast from Membranous Dysmenorrhœa.—Dr. Gurd exhibited what he thought might be a cast from a case of membranous dysmenorrhœa. The specimen was quite fresh, having been ejected from the vagina that morning. The patient, æt. 25, has been married two years ; no children. For past seven years has suffered greatly during menstruation, but says what she lost has always been fluid blood with the exception of one occasion, about a year ago, when, after "missing" three months, and while at the water-closet, felt as if some small mass had come away. During the night before expelling the above cast, patient had had agonising pains for several hours. She had not seen anything for two months. The cast was the shape of the interior

of the uterus, and weighed about three drachms. It was of a soft, membranous consistence and easily torn.

Dr. Trenholme thought, from the history of the case and from its appearance, it was the decidua of conception.

Dr. Gurd mentioned that the appearance exactly corresponded with what Dr. Thomas of New York describes as being a true membranous dysmenorrhœa cast, viz.: "External face soft and irregular, with perforations answering to opening of the utricular follicles. Inner face smooth, and feeling like mucous membrane."

Dr. Gardner said that it did not look like the product of conception.

The specimen was referred to Dr. Wilkins for microscopical examination.*

Ovariotomy—Removal of Pelvic Tumor containing Pus—Death forty-four hours after.—Dr. Gardner exhibited the tumor, and a bottle of the pus, which was odorless. Patient was unmarried, æt. 21, from the country, and with history of good health up to December last. Eight weeks ago became ill, feverish, and had repeated rigors. In the evenings would have a rigor and temperature of 103°. A tumor about size of gravid uterus, at fifth month, was noticed in the left iliac region, rounded, smooth, elastic, and not sore. She became emaciated. Her physician diagnosed a suppurated ovarian tumor. On examination, the uterus was felt anteverted and immovable. The sound entered 2½in. Roof of vagina was

* The specimen submitted for examination was hardened in Muller's fluid. Sections were made with microtome; stained, some with picro-carmine and others with hæmatoxyline, and mounted. On examination, connective tissue, which is so sparingly present in the normal uterine mucous membrane, was found to be enormously increased in the specimen under examination: the hypertrophied condition being due to this, as well as to the unusually large number of mucous and lymph corpuscles imprisoned in its meshes. It contained also a few spindle-shaped cells. The basement membrane of the exfoliated uterine glands was considerably thickened, the glands being of normal size, and most of them containing cells undergoing degeneration. No increase in vascularity. No traces of villi could be found. The presence of uterine glands, and the absence of the usual changes in them associated with impregnation, also the absence of villi and of increased vascularity, prove that impregnation had not taken place and that the specimen under examination was a hypertrophied mucous membrane of menstruation, which was prevented, by the unusually large amount of connective tissue present, from undergoing the usual *molecular* disintegration associated with this function.

encroached upon by the growth. Operated last Wednesday; it was very tedious, as there were adhesions all around to the pelvis. By tapping, 32 oz. of odorless pus came away. Over the surface of the tumor was a much dilated fallopian tube. The hemorrhage was difficult to control. Patient died after 44 hours. It was either a dermoid cyst lighted up to activity or an ordinary ovarian tumor, the sac of which had suppurated.

Interrupted Menstruation.—Dr. Gardner said that lately he seen, in consultation, a lady, aged about 43, who has commenced menstruating regularly after an interval of 14 years. During her early married life she had three children, after which her husband became morally insane, was morose, and lost all affection for wife and children. She was obliged to leave him. The return of the flow excited fears of malignant disease or tumor. Examination showed nothing wrong except slight hyperplasia of the uterus.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

The Value of Single Symptoms in the Diagnosis of many Diseases of Childhood.

The *Medical and Surgical Reporter*, July 12th, reproduces editorially the substance of a paper by Dr. L. M. Politzer, for many years Director of the Public Hospital for Children in Vienna, which was recently published in *Deutsche Med. Zeit.*, May 19, 1884. The symptoms principally considered are the following:—

(1.) *If the cry of children has a decided nasal sound*, we should always look for a retro-pharyngeal abscess. Whenever the cry of a child has this peculiar nasal or guttural sound, we should never omit touching the posterior wall of the pharynx with our finger; if the abscess is present we feel the tense, fluctuating swelling so characteristic of retro-pharyngeal abscess.

(2.) *A noisy expiration, which is greatly prolonged (ten to fifteen times), while inspiration is normal, and no other disturbance of breathing, no dyspnœa whatever exists*, is a sure sign of chorea major, and the same can be said of a greatly prolonged,

very loud, and forcible expiration, sounding like bellowing. This symptom of bellowing (brüllend) expiration has a typical character; it may happen for many weeks daily at one and the same hour, recurring every seven to ten seconds, and it usually consists of a single prolonged and forced expiration, or of a single expiratory roar. For months sometimes this symptom is the only sign of chorea major. It is easily cured by large doses of quinine, but is very prone to relapse and to be accompanied by other symptoms of chorea major.

(3.) *The symptom of high-thoracic, continually sighing inspiration* indicates the beginning of debility and paralysis of the heart. Ere cyanosis or paleness of the face, a weak, thread-like pulse, and coldness of the face, of the nose, and of the extremities develop themselves, this symptom makes its appearance. Contrary to stenotic respiration, as observed in croup, pneumonia, and œdema of the glottis, this sighing inspiration is not characterized by forced contractions of the diaphragm, and is not of abnormal type, but is accompanied by a laborious rise and fall of the thorax and jugulum, and instead of a stenotic noise by continuous sighing and moaning. No matter how the paralysis of the heart may be produced,—whether by so-called heart-poisons, as quinine, salicylic acid, pilocarpin, and digitalis, or otherwise—the symptom just described is pathognomonic of the disease, and whenever met with precautionary measures to combat the threatening palsy of the heart should be at once resorted to.

In some cases of acute fatty degeneration of the heart the same symptom has been observed.

(4.) *Expiration, decidedly diaphragmatic, and accompanied by a whistling sound of high pitch*, denotes bronchial asthma. A similar symptom is also met with in croup; but here it is associated with stenotic, forcible inspiration. The same is observed in capillary bronchitis; but the noisy breathing through the nose, the rapid development of pulmonary emphysema, the sudden appearance and disappearance of intense dyspnœa, and the fact of the latter and the whistling remitting during sleep, will prevent error.

(5.) *The existence of noticeable pauses between the end of each expiration and the beginning of the next inspiration* indicates severe catarrh of the larynx, and proves the absence of croup.

In consequence of the enormous aspiration of air in croup, inspiration and expiration follow each other immediately, while in laryngeal catarrh a pause takes place between the two acts, as the physician can convince himself by bringing his ear near the mouth of the patient, or by carefully watching the diaphragm and the jugulum, both of which are at rest during a pause.

(6.) *So-called stridulous expiration*, if present at birth and continuing day and night with rare interruptions of ten or fifteen minutes's duration, and usually considered by anxious mothers and the uninitiated a dangerous and ominous symptom, has neither diagnostic nor any other importance, being perfectly innocent, and generally ceasing of its own account after the lapse of a few months.

Then there are certain symptoms enabling us early to recognize various *diseases of the brain* in children :—

(1.) *A remarkable drowsiness, not accompanied by fever or any other symptom, and continuing for a longer time (one to three days)*, often precedes basilar meningitis.

Vomiting, fixed pain in the head, even a slow, irregular pulse, have not the same great significance as this sleepiness, as they may also happen in other maladies. Certainly, stress must be laid upon the absence of fever, for many infectious diseases begin in children with a peculiar drowsiness, always associated, however, with more or less high fever.

(2.) *Prominent anterior fontanelle*, if decidedly reaching above the level of the surrounding parts, and if tense and of such a resistence as not to yield under pressure, proves the presence of an exudation within the cranium, or an increase of the contents of the latter, and is met with in purulent meningitis of the convexity, in cerebro-spinal meningitis of the epidemic variety, in acute, essential and chronic hydrocephalus (here tense, but not necessarily very prominent), in great tumors, in echinococci, in acute œdema of the brain, and in intermeningeal

apoplexy. In simple congestion, in acute hyperæmia of the brain, the anterior fontanelle always is soft and depressible. If the fontanelle is very prominent, almost cuneated and unyielding, without the least trace of pulsation, the diagnosis of apoplexy of the new-born, and a large intermeningeal extravasation of blood, can be made with certainty.

(3.) *Remarkably slow motion and long fixation of the pupils with a vague look into vacancy, accompanied by a peculiar, slow opening and closing of the eyelids*, is a sign of beginning basilar meningitis.

Next, *peculiarities of the cry of children* aid us in the diagnosis.

(1.) *Violent, loud, penetrating crying, lasting two or three minutes, accompanied by great anxiety, as expressed in the face, and setting in almost typically, one to one and a half hours after the child has fallen asleep*, is a symptom of nightmare, and easily cured by quinine, which, in the dose of five to eight grains, should be administered one or two hours before retiring.

(2.) *Periodical crying, lasting five to ten minutes, and happening several times in the day, but occasionally only at night*, draws the attention to spasm of the bladder, if colic or dyspepsia is not present, and is cured by an emulsion of lycopodium, with or without belladonna.

(3.) *Frequent crying during defecation, dread of the act, and decided opposition of the child to going to stool*, indicate the existence of fissure of the anus. Constipation should be avoided in such cases, and zinc-ointment, with belladonna, locally applied.

(4.) *Violent, very painful, and nearly continuous crying, with restless throwing of the head from side to side* on the pillow, and frequent grasping of the head by the hands, are generally indicative of otalgia and otitis media and externa.

(5.) *Crying, lasting days and weeks, greatly increased on touching or moving the extremities*, accompanied by continuous, enormous perspiration and fever, denotes the presence of acute general rachitis, while the same symptom, without the sweating, but with decided emaciation, proves the existence of hereditary syphilis, and that the case is hopeless.

Of a great number of other symptoms we will mention but the following, as they are of more common occurrence and of greater importance :—

When children are remarkably weak and little inclined to moving about after apparently innocent complaints of very short duration, *spinal infantile paralysis* may be expected. The least disturbance of hearing after acute diseases must be carefully inquired into, as it might be caused by *circumscribed meningitis* at the base of the fourth ventricle. Depression of psychical activity in small children after grave infectious diseases frequently forms the commencement of *acquired idiocy;* here strychnine has been proven by experience an invaluable remedy. Ossification of the bones of the cranium postponed longer than normal denotes beginning *rachitis*. An anxious, stiff action in walking, sitting, rising, etc., and pain expressed in the face of children, who do not yet walk, when they are lifted or laid down, are met with in the commencement of *spondylitis*. When children with a very large, closed cranium for weeks vomit everything they eat, we have the proof that acute hydrocephalus is being added to the former chronic disease.

Excellent Advice regarding the Use of the Catheter.—The use of the catheter is in itself, to some extent, an evil ; a very slight one if properly conducted, capable of becoming considerable in careless or unwise hands. A catheter is, therefore, only to be employed when the evil which is to be removed by its means may be regarded as more grave than that which is incurred by using the instrument ; and such conditions as these are daily presented in practice. Let, then, every instrument employed be that which can be most easily passed, and is made of the least irritating material ; always of course consistently with the efficient attainment of the object in view. Thus metallic or rigid instruments, as a rule, should only be used when those which are soft and flexible have failed ; and for whatever purpose, they should not be larger than the needs of each case demand. By such gentle treatment a very considerable improvement in most cases is certainly attainable ; and in the course of time the greatly exaggerated

antipathy which widely exists to the use of instrumental treatment in the bladder will gradually but certainly disappear. I have one more caution to utter in regard of habitual catheterism, for those elderly patients whose circumstances have been above referred to; which is of great importance. When the bladder has for a long period of time been over-distended—the patient's condition having been overlooked for months, or even for years, in consequence perhaps of catheterism having been forbidden—it is, at this advanced period of the case, a serious matter to resort to it. Rashly undertaken, great as is the relief at first experienced, symptoms of fever—"urinary fever," as it is, I think, properly termed—often appear in a few days; cystitis occurs, catheterism is required more frequently, the urine becomes highly purulent, the powers of life feeble, the tongue dry, nourishment is refused, and the patient sinks—usually in about three or four weeks from the first employment of the instrument. If a necropsy be made, almost invariably the ureters will be found dilated on one or both sides; one of the kidneys diminished in bulk, and wasted, the other enlarged, inflamed, and perhaps the seat of numerous deposits of pus. It is said that such fatal histories following catheterism for long-continued distension of the bladder have occurred in individuals whose urinary organs, when examined after death, are found free from organic disease. Far be it from me to state that such a sequence of events is impossible; but it must be one of great rarity. No example has occurred within the range of my experience. When a patient, whose vesical functions have been long impaired, requires artificial relief, the best chance of saving him is to enjoin at once the recumbent position in a warm and equable temperature, usually in his bedroom, in order that the skin may act freely, and that no locomotion may be be possible. The catheter should be used skilfully and with great gentleness; not at first emptying the bladder completely, but always removing the instrument when pain is felt, as it often is before that condition is reached; and it must be applied again as soon as relief is manifestly required. I can scarcely over-estimate the value of these precautions, nor advise too

strongly the abstinence from movement and exposure of all kinds for a period of a few weeks in these particular cases. We may thus sometimes succeed in prolonging life, even at a very advanced term, and at the same time avoid the groundless but injurious opposition which is often manifested, as we have seen, to the use of the catheter; the want of which at an early period in the patient's history, and not the late recourse to it, has been the real cause of death in almost every one of the fatal cases described.—*Sir Henry Thompson's Lectures.*

Rabies in Birds.—Birds can, according to M. Gibier's showing, no longer be regarded as proof against rabies. As a rule, birds inoculated with the virus exhibit but few symptoms, or possibly none; but in a certain fowl it was observed that 14 days after inoculation paralysis of one of the legs and of some of the neck muscles set in. After some days the illness and paralysis passed away, and the bird continued to live. Acting on the notion that birds may contract the disease, but that, owing to the relative insensibility of their cerebro-spinal nervous system or from some other reason, the microbe may undergo its evolution without destroying life, inoculations were performed on a cock and pigeon with a drop of distilled water holding in suspension some cerebral matter taken from a rabid dog. The symptoms which resulted were anything but satisfactory. However, at the end of 12 days a small section of the brain of the pigeon was removed by trepanning. Microscopic examination revealed the microbe already described by M. Gibier. After this, inoculations were performed on three rats with the material taken from the pigeon's brain. All three rats perished with unmistakable signs of the disease. Similar investigations were attended with like results when the cock was the subject of the experiment. Another fact seems to have been brought to light. It is to the effect that the virulence of rabies in the cerebrum of the pigeon passes away after some months. We may also recall the researches made by M. Gibier on rats, which conclusively proved that neither garlic nor pilocarpin can stay the course of rabies.—*Lancet.*

Inheritance of Cancer.—In the course of a paper on the Local Origin of Malignant Growths (*British Medical Journal*), Mr. Jonathan Hutchinson observed: —"It is needful to say a few words as to the inheritance of cancer in its bearings upon the doctrine of its local origin, since an adverse argument has been founded upon it. It has been urged with much plausibility, that a disease which is capable of inheritance must be a constitutional one. No doubt, to some extent, this is true; but the argument must not be pushed beyond its legitimate scope. The laws of inheritance, as with property, so with disease, concern convection, and not origin or production. The inheritance of a fortune is a very different thing from its acquisition, and gives us no clue as to how that may have been accomplished. The causes of cancer, as we meet with it in practice, may, perhaps, be usefully classed as three—senility of tissue, local irritation, and inheritance. Of these, only the first two can rank as true causes; the latter, although practically of great importance, is only a mode of perpetuation of that which the other two have originated. Senility gives proclivity, local irritation excites, and subsequently hereditary transmission may perpetuate. The facts, as regards chimney-sweeps' cancer, give perhaps the best illustration of what I mean. Before this malady was practically suppressed by act of Parliament, it was commonly noted that when the trade of sweep went, as it often did, in a family, proneness to suffer from soot-warts, and for soot-warts to degenerate into cancer, increased in successive generations. Grandsons and great-grandsons were attacked at earlier ages, and with much greater frequency, than those who were new to the trade. Here, then, we observe the liability to a form of cancer, produced in the first instauce by a local cause, perpetuated and intensified by hereditary transmission. We witness the genesis of cancer, and see the shares taken by local irritation and inheritance, and how entirely secondary the latter is as regards the former. If we ask what that is which is inherited in the case of the transmission of cancer, probably the nearest approach to an answer which can be given will be to say that it is a peculiarity in cell-structure generally; not germs, not a

blood-malady, but a special type of cell organization, permitting with greater ease than in other persons the injurious influence of local causes. Even in the sweep, whose forefathers have suffered from soot-cancer, the transmitted tendency still waits for the exciting cause; and the disease occurs, not in internal and, therefore, protected parts, but on the same part as it did in his great-grandfather, and under the direct influence of exactly the same cause. Not that I would for a moment doubt that, in some instances, the inherited proclivity may be so strong that it does not wait for the help of any exciting cause, but manifests its power in the production of a cancer which may be considered spontaneous. It is probably in this way that we ought to explain almost all cases of cancer occurring in very early life; and it may be the fact that, in a few of these, something more definite than mere tissue proclivity may be transmitted, possibly even germinal matter, especially in those cases in which the parent was the subject of the malady. Thus, then, although I fully admit that in the examination of our patients we must make large allowance for the influence of inheritance, I wholly deny that we can allow it rank as a true cause of cancer."

Closure of the Jaws and its Treatment.

Dr. J. Ewing Mears, of Philadelphia, in an able paper in the *Amer. Jour. of the Med. Sciences*, discusses the various operations which have been suggested for the relief and cure of permanent closure of the jaws and the objections urged against them. He then narates a case in which he operated in the following manner:—By division of the ramus of the jaw, about its middle, exsection of the condyle and division of the insertion of the temporal muscle, thus releasing the coronoid process and affecting its removal with the condyle—division of the masseter muscle at its points of origin—non-interference with the cicatricial band. By this plan he hoped to secure sufficient space for free movement of the remaining portion of the ramus, and he proposed to utilize the cicatricial band as a *quasi* ligament, and obtain movement of the bone between this band and the interior pterygoid muscle. By division of the masseter at

its point of origin, he proposed to relieve the tension of this muscle and more effectually prevent union of the divided fibres. The plan of operation suggested and practised is novel, in the fact that it includes removal of both coronoid and condyloid processes with the upper half of the ramus, as well as division of the masseter, external pterygoid and temporal muscles, at the point of origin of the former, and the insertion of the latter. The advantages claimed over other methods are :—1. Its application to all forms of permanent closure, that due to temporo-maxillary anchylosis, as well as to cicatricial formations. 2. The utilization of the entire body of the jaw in opening the mouth, not only affording in this way greater advantage in mastication and articulation, but serving to prevent deformity. 3. The formation of a more perfect artificial joint in the removal of both processes, thus overcoming the resistance of the more or less fixed upper segment, when the joint is made either in the body or the ramus of the bone.—*Medical Digest.*

Apomorphia for Foreign Bodies in Air Passages.—Patient, aged 27, admitted to hospital with the following history: Ten weeks ago, while eating soup, was suddenly seized with a severe attack of coughing and dyspnœa, which lasted for several hours. They gradually diminished until patient was comparatively comfortable, but still dyspnœa and some cough remained. Such has been his condition since, the cough and shortness of breath being increased by exertion. Physical examination revealed a space about as large as the hand just under angle of right scapula dull on percussion, and on auscultation yielding crackling râles and an expiratory murmur. Signs also of general peritonitis over both lungs. Patient placed on apomorphia gr. 1-16 every four hours, and during the third night following the inception of the treatment, in an attack of coughing, the patient expelled a piece of bone about the size of a lentil or split pea, and which was the cause of the trouble. Prof. Ebstein said this was the third case in which apomorphia in his hands had caused the expulsion of foreign bodies in the air passages. He gave us no explanation of its special fitness for such cases, but recommended it very highly.—*Ebstein's Clinic.* (*Cincinnati Lancet & Clinic.*)

Seven Common Surgical Follies.—Dr. John B. Roberts, of Philadelphia, in a paper read before the Westchester Medical Society, aud published in the *Polyclinic*, points out what he holds to be follies in connection with seven surgical procedures. He calls them the ether folly, the incision folly, the sponge folly, the styptic folly, the suture folly, the adhesive plaster folly, and the dos efolly. The ether folly is almost universal. It consists in allowing the inhalation of atmospheric air with the vapor of the ether, as it is proper to do when giving chloroform. In giving ether the napkin holding it should not be removed from the patient's nose and mouth. When it is necessary to replenish the anæsthetic the corner of the napkin should be turned up and a fluid ounce of the ether dashed upon it, or it may be poured on the outside of the napkin and covered with a large dry towel. The pure ether vapor must alone be inhaled to secure its best effects. The only exception to this rule is when blueness and congestion of the face occur as a result of spasm of the respiratory muscles. Usually one deep inspiration will be sufficient to relieve this, when the napkin should be immediately replaced. Squibb's ether is in no way superior to that of other reputable manufacturers.

The incision folly consists in making a cramped cutaneous incision, instead of one sufficiently large to fully display the tissues needing examination. A cut of the skin three inches long is no more dangerous than one two inches long. In openiug abscesses a free cut is more satisfactory than the mere puncture or button-hole incision.

The sponge folly consists in the employment of sponges which have done previous service. They are seldom or never properly free from septic matter. To obviate this danger, napkins or towels are to be employed instead of sponges. Japanese paper napkins answer a very useful purpose. Absorbent cotton is valuable but it is expensive, and besides it is apt to leave filaments entangled in the wound.

The styptic folly is also a very common one. Alum, tannin, and that vilest of all styptics, Monsel's solution, prevent or delay union by first intention by irritating the edges of the wound

and preventing their coaptation. Except when a large vessel is severed, pressure is all that is demanded. When such a vessel is divided, ligation, torsion or acupressure should be employed, but under no circumstances styptics.

The suture folly. The old idea that sutures should not be employed in the scalp has been long exploded, but still another folly exists in connection with sutures, and that is that silver wire only should be employed for suturing purposes. Iron wire is equally valuable and much less expensive. A nice iron wire can be bought for five cents a spool. If it becomes a little rusty, it can be rubbed clean in a moment should the operator object to the presence of a small amount of oxide of iron in the wound.

The adhesive plaster folly is prevalent. The envelope of a stump or the covering up of an incision with adhesive plaster prevents drainage, is uncleanly and does no good. Adhesive plaster has little or no value in surgery, except for making extension and preventing motion in cases of fracture.

Sponges, styptics and silver wire are useless and worse than useless, and their banishment will be a long stride in the progress of surgery.

The dose folly consists in the exhibition of an insuffieient quantity of medicine. It should more properly be called the *small* dose folly. Of what use is a sixteenth or an eighth of a grain of morphia to a man in severe pain ? Give him a quarter or even a half grain, and repeat if necessary. And what is true of morphia is true of all other drugs—quinine, atropia, strychnine, digitalis, mercury, pilocarpine, etc. ;—they must be given with a bold hand to produce effect. First, be sure of your diagnosis and then go ahead. Many surgeons fail to cure because of the tentative use of drugs which comes out of uncertainty of diagnosis.—*Med. Age.*

The Treatment of Abortion.—Dr. Macan, in his recent report of the Rotunda Hospital, states that during the year 16 cases of abortion were admitted to the hospital. The treatment was expectant as long as possible, and in none was the vagina plugged, but in case of excessive hemorrhage before

the cervix was sufficiently dilated to allow removal of the ovum, the cervix was plugged with a tupelo tent, or dilated with Hegar's instrument, and the ovum removed. When any part of the ovum remained, causing putrid absorption or hemorrhage, the uterus was well washed out with the corrosive sublimate solution, the curette used, and then the corrosive sublimate again, and in septic cases, in addition, an iodoform suppository was introduced. The record of Dr. Macan's practice is a contribution to the subject of the proper management of inevitable abortion, a topic that has attracted much attention in recent years in this country. The profession, in fact, is yet divided in opinion, some advocating immediate and active interference—attacking *vi et armis*, that is with big and little curettes—and emptying the uterus as promptly as possible ; while others more conservative, or at least less radical, prefer an expectant course, letting their action depend upon events, persistent or severe hemorrhage, or an offensive discharge, being signals for immediate evacuation of the uterus.—*Medical News.*

Trephining for Epilepsy with Delusions.—Dr. Frank Warner, of Columbus, Ohio, reports the following case in the *Cincinnati Lancet & Clinic:* Four years before his application for treatment for epilepsy John W. had fallen from a scaffold, and, as he struck below, the occipital bone was penetrated by a nail which was protruding through a board. A short time afterward he became affected with epilepsy, pain in the head over the seat of the fracture, which was just to left of the mesial line, in the occipital bone, and an inch below the articulation of this bone with the parietal, and after a while developed peculiar nervous symptoms, becoming irritable, easily excited, and manifested occasional delusions. At first, symptoms were mild, the epileptic attacks occurring once a month, and then, perhaps, one slight convulsion ending the manifestation of the disorder. In the first two years little change was manifested, but gradually the epileptic seizures became more frequent, and instead of one or two convulsions ending the attack, three to six would follow in quick succession. Occasional delusions took possession of the patient, and he imagined persons designing

evil things against him, frequently prepared to protect himself by carrying dangerous implements. Trephining was done over the point where the nail had entered the skull, and three buttons removed, the reason for taking out more than one being that fragments from the inner table could be felt, which we thought proper to remove. Pressure on the brain from the depressed bone was very slight, but the ragged edges were sufficient to keep up a continuous local meningeal inflammation. The patient made a rapid recovery, and for two or three weeks none of the old symptoms presented themselves, then a number of convulsions followed, with the characteristic delusions. These, however, soon passed away, and he made a rapid, complete, and permanent cure, four years having now passed since the operation, and the patient continues in perfect mental and physical health.—*Amer. Practitioner.*

Persistent Omphalo-mesenteric Remains; THEIR IMPORTANCE IN THE CAUSATION OF INTESTINAL DUPLICATION, CYST-FORMATION, AND OBSTRUCTION.—The pouch-like formation of intestine occasionally seen projecting from the lower portion of the ileum is universally known as Meckel's diverticulum. Not that this distinguished anatomist was its discoverer, but to him we owe not only the almost universal acceptance of his theory of the origin of the pouch in question, but are also indebted to him for calling conspicuous attention to its importance in the causation of serious disease. In an instructive and elaborate article in the July number of the *Amer. Journal of the Med. Sciences*, Dr. Reginald H. Fitz of Boston considers this whole subject and points out that the view—that most, if not all, well-authenticated instances of duplication of the intestinal tract, at any part of its course, are the probable result of the persistence and growth of the remains of the vitelline duct—is rendered highly probable from what is known concerning the development of the intestine. Attention is also called to cystic dilatation of the diverticulum. These retention cysts, as they are called, may have their cavity continuous or discontinuous with the intestine. Moreover, such cysts of possible intestinal origin are not limited to the abdominal cavity, having

been observed in the vicinity of the œsophagus, in the abdominal walls, in the vicinity of the umbilicus. The clinical importance of these cysts is duly considered. Dr. Fitz points out that the vitelline duct is composed not only of layers of tissue equivalent to those forming the coats of the intestine, but it is also accompanied by blood-vessels. The relation of these omphalo-mesenteric vessels or their remains to intestinal strangulation is fully discussed, and the importance of bearing in mind the congenital nature of certain of the cases of acute intestinal obstruction is earnestly insisted upon. Dr. Fitz finds that—

1. Bands and cords as a cause of acute intestinal obstruction are second in importance to intussusception alone.

2. Their seat, structure and relation are such as frequently admit their origin from obliterated or patent omphalo-mesenteric vessels, either alone or in connection with Meckel's diverticulum and oppose their origin from peritonitis.

3. Recorded cases of intestinal strangulation from Meckel's diverticulum, in most instances at least, belong in the above series.

4. In the region where these congenital causes are most frequently met with, an occasional cause of intestinal strangulation, viz., the vermiform appendage, is also found.

5. It would seem, therefore, that in the operation of abdominal section for the relief of acute intestinal obstruction not due to intussusception and in the absence of local symptoms calling for the preferable exploration of other parts of the abdominal cavity, the lower right quadrant should be selected as the seat of the incision.

The vicinity of the navel and the lower three feet of the ileum should then receive the earliest attention. If a band is discovered, it is most likely to be a persistent vitelline duct—*i.e.*, Meckel's diverticulum, or an omphalo-mesenteric vessel either patent or obliterated, or both these structures in continuity. The section of the band may thus necessitate opening the intestinal canal or a blood-vessel of large size. Each of these alternatives is to be guarded against, and the removal of the entire band is to be sought for, lest subsequent adherence prove a fresh source of strangulation.—*Maryland Med. Journal.*

CANADA

Medical and Surgical Journal.

MONTREAL, AUGUST, 1884.

CREMATION.

The recent decision of Mr. Justice Stephen, whereby cremation is made legal in Great Britain, has naturally given fresh hope to those in all parts of the world who are in favor of that method of disposing of the dead. The fact of the eminent Prof. Gross having ordered his remains to be treated by cremation will also doubtless cause the practice to "boom" somewhat on this side of the Atlantic. It is true the cremationsts have had a reverse or two lately. Thus in the British Parliament a bill proposed to regulate cremation and place it under proper restrictions was recently negatived by nearly two to one. Then the other day the Chairman of the Health Exhibition Committee, who, forsooth, does not approve of cremation, refused to give the "votaries of ashes" a stall at South Kensington. "May we live to see him cremated! (after death)," says the editor of the *Pall Mall Gazette*, and so say we.

We make no secret of it that we are strong advocates of cremation, and sympathize heartily with those who are striving to overcome the prejudices which have been raised against it. The vast majority of those who oppose cremation are of the sentimental class, and with them argument is out of the question. They shudder at the thought of their precious remains being subjected to such a process, but have no hesitation in allowing them to become the hiding-place of worms, while undergoing the slow process of decomposition which obtains from the ordinary earth system of disposal. These are, if anything, more determined in their opposition than the class who object to cremation on religious grounds. With the latter we

can have some patience, and perhaps a little sympathy. They argue that the burning of the dead is "foreign to the customs, and antagonistic to the genius, of Christianity." They mean, in other words, that it savours of disbelief in the cardinal doctrine of the Resurrection, besides contradicting all reference to the disposal of the dead in the sacred writings. Of course it is impossible to ignore this aspect of the subject, and in fact it would not be wise to do so. But, after all, what practical difference can it make whether the elements of which our bodies are composed are liberated in a rapid and cleanly way by fire, or slowly in the earth? The chemist will tell you that the processes amount to the same thing in the end.

But we advocate cremation as we advocate all measures of a sanitary nature. It has been proved over and over again that the dead are often a source of peril to the health of the survivors, and of course the danger increases with the number of the dead and the growth of the population. Thus wells and springs in the neighbourhood of cemeteries are liable to become contaminated after a time, giving rise to diarrhœas and probably diseases of a typhoid nature. Besides, as cities extend, the places of burial have to be disturbed, and it is well known that certain soils have a preservative rather than a disintegrating action, so that after many years, in old and abandoned cemeteries, there will still be many bodies only partly decomposed. These, when exposed, must contaminate the air and originate disease. In our own city, within our recollection, two graveyards have been opened up and emptied of their contents, and before another half century has passed the present places of burial will be also threatened. What a mistake it is for a man to imagine that he is going to his last resting-place when he is buried! His bones may be disturbed half-a-dozen times before they crumble and disappear. Even the grave of the immortal Shakespeare is threatened with desecration, and simply to gratify an idle curiosity.

Now, cremation has none of these objections. It is a rapid and cleanly process, and the health of the survivors is not imperilled in any way. It is not much more expensive than ordinary

burial, and if it became more generally employed would be much less costly. At the Milan crematorium the charge made is only fifty francs, and where can one get a lot in a fashionable part of either of our Montreal cemeteries for an equivalent sum—ten dollars? The charge for cremation at the Boston crematorium is twelve dollars.

The only serious objection to cremation is the legal one; and to meet it, we must admit, is not easy. But it is not insuperable. Some system of preliminary examination would have to be devised, whereupon a sworn certificate could be given in every case of death. In cases of difficulty or doubt a *post-mortem* examination should be enforced. This might necessitate the appointment of a competent pathologist and chemist in connection with each crematorium. The ashes could be reserved for a certain time in every case, as it is stated that some of the mineral poisons are not destroyed during cremation.

VICTORIA-LAVAL.

It will be remembered that, at the last meeting of the Provincial Medical Board, Dr. Lachapelle, a member of the Board and a professor in Laval University, repeated formally certain statements which had already appeared in one of the local papers. These statements were to the effect that, at the time of the written examination held by the Medical Faculty of Victoria College, certain of the examination papers had found their way into the possession of some of the students several days prior to the examination. *Prima facie* evidence that this had actually occurred was furnished by the fact that on the 28th March Dr. Lachapelle placed in the hands of Mr. H. R. Gray documents purporting to contain the questions which would be given at the final test. The examination having been held on the 31st of the same month, these and the actual papers were published side by side. Their similarity was unquestionable. The gravamen of the charge, moreover, lay in the fact that it was further stated that these papers had been furnished to students by professors. Dr. Lachapelle requested the Board to apply to the Legislature for a Royal Commission, averring that before such

a tribunal, competent to take evidence under oath, he would produce evidence which, he believed, would prove the truth of his charges. At the meeting, Dr. Hingston, on the part of the Victoria College, admitted that, in some way (to them unknown), papers had been (presumably by fraud) possessed by students in anticipation of the examination. He stated that his school had already named a committee of its members who were not amongst those pointed at, who were then engaged in an investigation of the matter. They had, however, up to that time arrived at no result, but he thought a very short time longer would enable them to discover the guilty parties. Dr. Howard wished the matter relegated to this committee for further action. The meeting would not entertain the proposition for a Royal Commission, but decided to add to the committee above-mentioned all the governors of the College resident in the city and district of Montreal to continue the *enquête* already begun. This joint committee has now held several meetings, and has dispersed without having come to any conclusion. Repeated attempts were made to induce Dr. Lachapelle to make specific charges against certain of the professors and to give up the name of his informant. This he always declined to do, claiming that, in the first place, the committee having no power to summon witnesses or to oblige them to testify, he might not be in a position to substantiate his charges and would thus leave himself open to an action for libel; and that, in the second place, he was bound by a promise of secresy which was inviolable except before a court of law. He persisted, however, in declaring his readiness to testify upon all these points if allowed a Royal Commission or other tribunal having similar powers.

It will thus be seen that the efforts of the committee have been futile, owing to their inability to secure evidence. The matter, therefore, was left just where it was before. The only other means left for the Victoria School to clear itself from these grave accusations was for implicated professors to institute suits against Dr. Lachapelle for libel and defamation of character. This, we are informed through the daily papers, has already been done in the names of Drs. D'Orsonnens and Mignault. It may appear

the proper thing that the President and the Secretary should be those selected to come forward as prosecutors in this action; but, perhaps, it would have been evidence of a stronger feeling of the strength of their case if the examiners most severely implicated had stept first into the field. All interested in the good name of our provincial universities, and in maintaining a proper standard for those degrees which carry with them the license to practice, will look to the trying of these cases to establish clearly the rights of the whole affair

CANADA MEDICAL ASSOCIATION.

Everything points towards a very successful meeting of the Canada Medical Association in Montreal on the 25th inst. In answer to the invitation extended by the local committee to the medical members of the British Association, twenty-three have already expressed their intention of being present at this meeting and at the dinner on the 26th. Amongst these are a large number of well-known writers and scientists. Over seventy members of the Canada Association have replied to the Secretary's circular saying they may be expected to arrive. The number of papers is considerably larger than usual. The list, so far, is as follows (others, no doubt, will come in later) :—

1. Dr. Fenwick, Montreal ..... Abscess of Abdominal Parietes extending from Meckel's Diverticulum.
2. Dr. Gardiner, London..... Burns and their Results.
3. Dr, Fulton, Toronto ..... Thoraco-plastic operation of Estlander.
4. Dr. Shepherd, " ..... Compound Fracture of the Leg—Rupture of the Anterior Tibial Artery —Ligature—Recovery. And An Obscure case of Popliteal Aneurism.
5. Dr. Blackader, " ..... A case of Congenital Lipoma. And Recent Advances in Infant Feeding.
6. Dr. Rosebrugh, Hamilton.... Recent Progress in Abdominal Surgery.
7. Dr. O. C. Brown, Actonvale... ———————
8. Dr. Oldwright, Toronto..... Myxo-Sarcoma. (Sequel to last year's paper.)
9. Dr. Campbell, Seaforth..... Puerperal Septicæmia.
10. Dr. Ryerson, Toronto..... Post-nasal Catarrh.
11. Dr. Buller, Montreal..... Jequirity in Granular Ophthalmia.
    Dr. MacDonnell, Montreal... Exhibits Medical Cases.
    Dr. Gurd, Montreal..... " " "
12. Dr. Major, Montreal ..... Recent Progress in Laryngology.
13. Dr. Osler, Montreal ..... Pneumonia as an Infectious Disease.
14. Dr. Dupuis, Kingston ..... Nostrums and Medical Advertising.
15. Dr. H. Howard, Montreal..... Materia Cogitans.

16. Dr. Harrison, Selkirk..... Cerebro-Spinal Meningitis.
17. Dr. Lett, Guelph..... Opium Habit and its Treatment.
18. Dr. Burnham, Toronto..... The Use of Carbolic Acid in some of the External Diseases of the Eye.
19. Dr. Marsden, Quebec ..... Asiatic Cholera.
20. Dr. R. P. Howard, Montreal.. Some of the varieties of Dyspnœa met with in Bright's Disease.
21. Dr. Desjardins, Montreal..... Keratoscopie, comme moyen de diagnostic dans l'astigmatisme.
22. Dr. Bethune, Wingham..... A peculiar parasite found in an abscess of the thigh.
23. Dr. Worthington, Clinton, Ont. Reports of two cases of Diabetes Insipidus, one of which was complicated with Exophthalmic Goitre.
24. Dr. Gardner, Montreal..... Common Errors in Gynæcological Practice.
25. Dr. Playter, Toronto ..... The relations of the Medical Profession with the Public.
26. Dr. Roddick, Montreal ..... Surgical Jottings.

It would be well for those who are coming to remember that, just at that time, the hotels will be crowded. They should secure accommodation by telegraph in advance, if possible. As we have already stated, the usual reduced rates have been secured from all the leading steamboat and railway companies. Certificates of membership for securing these can be obtained by application to Dr. James Bell, Montreal (acting General Secretary), or through any of the local secretaries, whose names are as follows:—Dr. Bray, Chatham; Dr. Coleman, St. John, N.B.; Dr. Black, Halifax, and Dr. Betts, Winnipeg.

The British Medical Association assembled at Bedford on the 29th of July. With its usual enterprise, the *N. Y. Medical Record* contains in its issue of the 2nd of August a cabled report of the proceedings. Dr. Canning, the President, gave an address, referring to the present epidemic of cholera in Europe and referring to the importance, in consequence, of the sanitation of cities. The subject of micro-organisms and their relation to disease was next considered. He then dwelt upon the advantages to be expected from the newly-erected section on Pharmacology and Therapeutics. The following day Dr. Lewis A. Sayre, of New York, gave a demonstration of the application of the plastic jacket in diseases of the spinal column. D. Ord, of London, delivered the address on Medicine. His subject was "Some Perversions of Nutrition caused by the

Nervous System." Sir Wm. MacCormac delivered an address on "Abdominal Surgery," reviewing the advances made in that department during the past few years. In the section on Medicine, Dr. Geo. Johnson opened a discussion on "Albuminuria, its Causes, Consequences, Diagnosis and Treatment." A letter was read from Sir Andrew Clark, in which he divided the non-functional forms of albuminuria into four varieties—hepatic, oxaluric, gouty, and nervous. The same number of the *Record* contains the address on Physiology by Dr. Peter Redfern, of London. Dr. Geo. H. Kidd delivered an address on Obstetric Medicine. The President addressed the meeting on "The General Character of Epidemics." In the course of his remarks he referred to the prevalenee of cholera on the continent, and urged due vigilance on the part of the profession and government of Great Britain against the invasion. Nothing was of more importance than the purification of the drinking water, attention to perfect sewerage and the free use of disinfectants. In fact, the purer the water of a district the lower was the death-rate. The labors of Pasteur, Budd and Koch were appropriately referred to and eulogized. In the section on Medicine, Dr. Douglass Powell introduced a discussion on the causative relative relations of phthisis. His line of argument was against the contagiousness of the disease. Dr. Dyce Duckworth introduced the subject of "Rheumatoid Arthritis." Dr. Shoemaker, of Philadelphia, presented the subject of the "Oleates," and urged their further study. The *Record* of the 9th inst. contains Dr. Kidd's address in full.

Specific Treatment of Diphtheria.—We took occasion to refer to this subject a short time since, and return to it just now to add the experience of a recent writer in the *Medical News*, Dr. Geo. A. Lynn, of Pennsylvania. The drug which seems to promise the best results, considered both theoretically and experimentally, is the corrosive sublimate. The conclusions of Dr. Lynn are that, to use the remedy as a specific, 1st. It must be given in the first stage of the disease; 2nd. It must be given in large doses, frequently repeated. It is claimed for it that, used in this way, it mitigates the severity of all the general

symptoms, " prevents the generation of the poison in the membrane, in mild cases checks the formation of membrane at once, and causes what is formed to speedily disappear." It is best given in solution, and the vehicle preferred is the elixir of bismuth and pepsin. The dose recommended is, for a child three years old, gr. 1-16, or, in a malignant case, gr. 1-8, in a teaspoonful of the elixir every three hours; for an adult from gr. 1-12 to gr. 1-8 every three hours. " It rarely disturbs the stomach, and soon allays existing nausea." It is advised that, if the case be far advanced before being seen, brandy and iron be added to the treatment.

Ruptured Perineum treated with One Stitch.—We notice in the July number of the *American Journal of Obstetrics* that Dr. H. J. Lee, of Cleveland, O., reports three cases of lacerated perineum treated by a single suture, as recommended originally by Dr. Alloway of this city. He says the ease with which the operation is performed and the perfect results given by Dr. Alloway are sufficient reasons to warrant a further trial, and, if found to result as perfectly in other hands, it surely should succeed the more complicated operation which appears so formidable to both physician and patient. Dr. Lee does not agree entirely with the originator of the operation on one point. Thus, while Dr. Alloway thinks that the suture may be passed " at any point between the beginning and the end of the laceration," he contends that the suture should always be passed " on a level with the beginning of the laceration." He compliments Dr. Alloway highly on his conception of the operation, and wonders that, being so simple, it was not thought of before.

Fees Extraordinary.—A dentist of New York of the name of Atkinson recently did four days' work arranging and filling teeth, etc., for General Blanco, the Venezuelan President, and family. The General expected to pay a pretty large bill, especially as other engagements had been postponed to suit his convenience, but he confessed to some surprise when an account was rendered him for $7,000. A mutual friend suggested that there was some mistake, but this is indignantly denied. A compromise was offered of $1,500, but it is understood that suit will be entered for the sum originally claimed.

Female Pharmacists.—It may not be generally known that there exists in the United States a special school for the teaching of pharmacy to women. The institution is located in Louisville, Ky., and has recently held its first commencement, at which an address was given by Dr. Yandell. There is no doubt that this calling is one peculiarly fitted to women, and therefore it is much to be desired that the example set here will be extensively followed elsewhere. More employment, and more remunerative employment, is demanded for women of better education, and pharmacy would seem to supply one of these of the most suitable character.

Painless Slaughtering.—Dr. Richardson, always working in the direction of serving the best interests of both men and animals, has been further experimenting with reference to the use of anæsthetics previous to killing. He now advises the employment of carbonic oxide gas charged with the vapor of chloroform. Several hundred dogs have been painlessly put to death in this way at the Dogs' Home, Battersea, and Dr. Richardson suggests that the method should be employed in the killing of animals used as food.

—Dr. William Osler, of McGill University, Montreal, is prominently and favorably mentioned in connection with the Professorship of Clinical Medicine in the University of Pennsylvania, rendered vacant by the transfer of Dr. Pepper to the Chair of Theory and Practice of Medicine. Dr. Osler is widely known as a talented scholar, a learned clinician and a popular teacher, and his election, which it is understood will be very acceptable to the Medical Faculty, would add undoubtedly to the high reputation which the University has always enjoyed. Dr. Osler has just been invited to deliver, next spring, the Gulstonian lectures before the Royal College of Physicians of London, of which body he was elected a Fellow in May, 1883.

We take the above from the Philadelphia *Medical News* of the 9th inst. If Dr. Osler should finally accept this appointment, whilst recognizing its appropriateness, we could not but feel that his removal involved a serious loss both to McGill University and to this city.

THE "GAMGEE" SPONGES.—We have received from W. A. Dyer & Co. specimens of these admirable articles. This substitute for the ordinary surgeon's sponge is the invention of Mr. Sampson Gamgee, the British surgeon so well-known for his great success in dry-dressing of wounds. It consists essentially of a nucleus of cocoanut fibre, around which is a layer of fine absorbent cotton. The whole is covered with a thin, pliable gauze. Many of them are used plain, as above described; others are made antiseptic at the moment of using by breaking a small glass pearl hidden in the heart of the sponge and containing thymol, eucalyptol, carbolic acid, or any other substance which may be desired. They are highly spoken of by the English medical papers, and, in these days of antiseptic boom, are sure to become popular at once. They can be obtained from the above-named firm.

Medical Items.

PERSONAL—We were pleased to receive a visit from Dr. J. B. Lawford, formerly of this city. Dr. Lawford has been for some time house surgeon of the Royal Ophthalmic Hospital, Moorfields. He has resigned that position and been appointed pathologist to the same hospital. He thinks it possible he may remain permanently in London.

DR. CÆSAR HENRY HAWKINS.—This celebrated surgeon, who has recently died at an advanced age, was sergeant-surgeon to Her Majesty the Queen for many years. He held the position of surgeon to St. George's Hospital for thirty-two years. He was also Examiner in Surgery of the Royal College of Surgeons, of which he was twice elected president.

—Prof. S. W. Gross brought a case of gumma of the breast before the class last season, which was interesting, both because of the infrequency of its occurrence and of its resemblance to malignant disease. Gumma of other parts of the body are met with almost every day in hospital practice, but it is extremely uncommon to find this manifestation of the syphilitic poison on the female breast. The patient, who was 28 years old, and appeared to be in good health, complained of trouble in the left breast. Examination showed a cake-like superficial tumor

involving the skin and subcutaneous connective tissue. The skin over the tumor was livid in color, and the nipple was retracted into it. These signs apparently pointed to superficial scirrhus. But from the absence of pain, and axillary involvement, as well as the history of a dissolute husband and three miscarriages, Prof. Gross concluded that it was a gumma. The woman was put on the mixed specific treatment, and the tumor disappeared in a short time.

—A paper on "The Economic Preparation of some Antiseptic Dressings," by Signor Silvio Plevani, has been published in the *Gazzetta degli Ospitale*. He states that tow, which is a very cheap residual material, can be used for all surgical purposes instead of absorbent cotton, when prepared according to the following directions: Boil the tow for some time in lye made with wood ashes, or with a two per cent. solution of carbonate of soda; then wash it repeatedly in water. The tow thus deprived of grease is immersed in a ten per cent. solution of chloride of lime, and kept in it some hours, with occasional stirring, until it has become perfectly white. It is then washed thoroughly in pure water until the liquid squeezed from it is perfectly limpid; drying and carding complete the process.

—Experience, the greatest of all teachers, has demonstrated that, in a large number of cases, Cod Liver Oil is beneficial for a few weeks, that the patient improves upon it, gains flesh and strength, but, unfortunately, this improvement does not continue; right in the midst of flattering prospects the patient comes to a halt, ceases to gain weight, or otherwise improve. Physicians have experimented for years in their endeavor to overcome this objection; it has finally been accomplished by Drs. G. Overend Drewry and F. C. Bartlett of London, England, who, by means of pancreatine, have succeeded in perfectly digesting or hydrating the oil, thus giving to the profession cod liver oil in a perfectly assimilable form, overcoming the only objection to its continued use. This hydrated oil is christened *Hydroleine*, and after nearly five years of extended trial it has been extensively approved of.

Mellin's Food.—Dr. H. E. Deane, resident physician of Detroit Foundlings' Home, Detroit, Mich., says:—"During the year we care for a large number of infants. The mortality in our nursery has been lessened more than one-half since we commenced using Mellin's Food. Our babies never looked so well as at present."

CANADA
MEDICAL & SURGICAL JOURNAL
SEPTEMBER, 1884.

Original Communications.

ADDRESS ON ABDOMINAL SURGERY.

By LAWSON TAIT, F.R.C.S., Eng. & Edin.

(*Delivered before the Canada Medical Association, Montreal, Aug. 26th*, 1884.)

Mr. President and Gentlemen,—Every gardener knows that a plant long grown on the same soil rises or sinks, or, somehow or other, gets to a level from which it varies not so long as its conditions remain the same, and he knows as well that if he takes that plant to a new soil which suits it—if he grows it under new conditions—its growth, change and development are practically endless. What we know of plants is, within limits, true of humanity ; and if we require proof and illustration of this, where need we go but to this endless continent of yours.

I am not at present concerned with natural boundaries created by languages which come from Sweden and Poland, Denmark and Scotland, Russia and Ireland, which temporarily limit intercourse between different peoples who perhaps settled here. Still less do I trouble about a line on the map which marks a practical Republic on the south from a splendid Democracy on the north. I have only to do with the great fact of human history—I think the greatest fact—that from out of the troubles and distresses of our eastern countries, or out of countries oppressed by overpopulation, and still more by the effete policies of governments of past centuries dislocated into modern life, from these there has come a great country and a great people, whose growth, change and development promise to be practically endless.

Of my own country and my own people you will not expect me—you would not wish me—to say anything disparaging. We are an old and a respectable race, and, by virtue of your descent, you share that age, and you have brought over with you a full measure of the respectability. But in transit you have lost that questionable virtue of extreme conservatism which we retain in every conceivable phase of life. We used to have mail coaches protected against robbers by armed men, properly called guards, and we continue to call our railway servants guards without the slightest reason, save that they seem to be in some fashion successors to the blunderbus-bearers of the eighteenth century. On the other hand, you very properly call the same officials conductors. We still build our railway carriages in compartments fitted to hold six people, confined boxes that are stuffy, inconvenient, wasteful of room, and dangerous, and we do this only because one hundred years ago we built our stage coaches on the same pattern, and we thought, and we continue to think, that by sticking three of these old coaches end to end we must of necessity construct the very best kind of vehicle for railway travelling. Untrammelled by tradition, you have continued to build carriages far more convenient and suitable in every way. You have even sent them over to England for our use some ten years ago, but they had actually to be removed from our railways because the public would not use them.

I might gather further illustrations of this intensely conservative spirit which governs everything English. I might wander into the regions of politics and religion and hundreds of other sources, but I prefer to take one of which I can speak at length and in detail—one upon which I believe, if I read aright the compliment you pay me by asking me to appear here before you, I can speak with some authority.

In my youth the medical education of a British student was not considered complete unless he had made a tour of the schools of France and Germany, and, like others, I felt of myself as was said of Proteus :

> " 'Twould be a great impeachment to his age
> In having known no travel in his youth."

But I wish now that the time and money therein spent had been directed to the western instead of to the eastern continent. And I now predict that ere long it will be to the medical schools of America that our students will travel, as did the apprentices of old before they settled down to the serious exercise of their craft.

For many years past I have been visited by many of my professional brethren from this side the Atlantic, many of whom have settled down for days and weeks, and even months, to see my work. I have been overwhelmed by the kindliest invitations to visit this continent, but till now I have never ventured across. This delay is an instance of British conservatism, for it is very little the fashion amongst us to take long holidays. I have not had a holiday for seven years, and only the most eminent doctors in England take an annual outing; but on this side I find that none of you think much of a trip across the water, involving leaving your business for three or four months, and, from what I have heard, the struggle for existence is as keen as it is with us, perhaps keener.

My American visitors have, one and all, impressed me with the feature of mind which I fear in England we do not possess—the power of judging any question solely upon its merits, and entirely apart from any prejudice, tradition, or personal bias. No matter how we may struggle against it, tradition rules all we do; we cannot throw off its shackles, and I am bound to plead guilty to this weakness myself, perhaps as fully as any of my countrymen may be compelled to do. I may have broken free in some few places, but I know I am firmly bound in others; and my hope is, that my visit to a freer country and a better climate may extend my mental vision.

To come to my intended illustration, let me briefly remind you of the early history of abdominal surgery. The first operation for the removal of an ovarian tumor was performed unwittingly, in 1701, in a Scotch village: for Robert Houston began there a tapping, and finished by making a successful ovariotomy. It was not till 1809, eighty-six years after Houston's case was published, that his example was imitated, and even then it was

not in Europe, but in the fresh soil of the backwoods of Kentucky that the young seedling obtained its first full growth, and from that time and from this country dates the history of abdominal surgery. But how slow the growth! In 1863 I heard my master, the Professor of Surgery in the University of Edinburgh, settle all this vast field of human progress in these few words, "Abdominal surgery is abominable surgery." Syme, the greatest surgeon by far with whom I have ever come in contact, shared the views of his colleague in this matter, and I fear that in both the sentiments originated far less in the merits of the question than in their mutual dislike (almost the only sentiment they had in common) of John Lizars, who, having read MacDowell's manuscript when it was sent to John Bell, was immensely struck by the success of the heroic Kentuckian, and was desirous of following his brilliant example. Most unfortunately for humanity, the success of Lizars was of a very doubtful kind, and abdominal surgery had to wait for the advent of Dr. Charles Clay and Mr. Isaac Baker Brown. The story of the latter brilliant and unfortunate surgeon is now a twice-told tale, and I can only repeat what I have said at length elsewhere—that his disastrous downfall was a misfortune for humanity, delaying as it did the progress of abdominal surgery for fully a quarter of a century. The whole question of this progress lay in the peculiarly narrow issue as to whether the pedicles of ovarian tumors should be dealt with inside the peritoneum or outside it. Here, again, the new country was first in the race; for between 1820 and 1830 the decision in favor of the intra-peritoneal treatment was given in America in such a way that the question ought never to have been reopened. The arbitrament of abdominal surgery between 1866 and 1876 was left in the hands of a man still living, and he carried through his practice a mortality so heavy as to be absolutely prohibitive of fresh enterprise. Mr. Baker Brown left off practice in 1866 with a mortality of 10 per cent. with the cautery, whilst, after operating on a thousand cases, Mr. Spencer Wells had a mortality of 12 per cent. in the last hundred with the ligature, and over the whole thousand the mortality was exactly 25 per cent.

With such results as these, the marvel is not that the conservative surgeons cried out twenty years ago that the craft was in danger, but that the removal of ovarian tumors ever became an accepted operation at all.

As I have said over and over again,—as I shall never tire of saying—to Keith is due the whole credit of the modern development of abdominal surgery, and it has ever seemed to me specially hard that while wealth and a title have been the lot of the man who had done nothing but obstruct progress, yet to the author of our present proud position nothing has come save a good deal of misrepresentation and abuse.

In 1878 the doctrines and practice of Lister, after twelve years of preaching on the part of Mr. Lister, had penetrated to London and were taken up by Mr. Wells and his assistants. I had practised all the details in their ever-varying form, as recommended by Mr. Lister, from 1866 onwards, and gave them up one after another as I found they disappointed and hindered me. Finally, I gave the spray and its adjuncts a long and complete trial—a trial far more careful in its details than anything I ever saw elsewhere, extending over three years. I have published in detail the disastrous results of this experiment, and at last gave up all these unnecessary dangers, and since January 7th, 1881, my practice has been entirely free from all these details. Since then my example has been followed by Dr. Keith, Dr. Bantock, and by my colleague, Dr. Savage, and the only surgeon now who uses the Listerian details for abdominal surgery is Mr. Knowsley Thornton. He still claims for Listerism the most of our present progress, in spite of the fact that Keith, Bantock, Savage and myself have all far better results without Listerism than Mr. Thornton has with it. Mr. Thornton went so far recently, in a communication to Dr. ——, which that gentleman published, as to say that his (Mr. Thornton's) bad results in hysterectomy were due to the fact that in this operation the Listerian details could not be effectually applied. But the facts of the practices of Mr. Thornton and Dr. Bantock, the two surgeons to the Samaritan Hospital, settle this question when they are contrasted. Mr. Thornton uses the

Listerian details for hysterectomy as well as he can, and in twelve cases he has had five deaths, while Dr. Bantock does not use the Listerian details at all, and in twenty-two cases he has had only two deaths. The explanation of the difference will be evident to every one who has seen both of these gentlemen operate. To see Dr. Bantock do a hysterectomy is a lesson in surgery, and one from which I learnt a great deal.

To see my own work, I have been honored with the visits of a large number of surgeons of this continent, some of whom I see here now. I believe they, one and all, came with a belief that they would find I had some secret antiseptic agent, the use of which was the explanation of my success. If I have such an agent, it must be of universal existence in nature, for I have made some of my visitors take the water from the tap and put it into the basins for the sponges, and over the instruments and into the abdomen. I have made them drink it and have offered it to them for analysis, and, so far, I have not been detected in any magic exercise. My visitors always ask to what I attribute my success, and I answer that I cannot tell. They frequently suggest that it is climate. My answer is that our climate is the most variable and uncertain—the worst in the world. It is not fresh air, for the great majority of my operations, and always the worst, are done right in the middle of a large manufacturing town.

If I may formulate my own answers, they would be briefly to this effect: I have given up my life to this work, and I engage in no other kind of practice; therefore I have a constant weekly experience of five or six of these operations, sometimes as many as eight or ten. I pay the most minute attention to every detail, and maintain an absolute rule of iron over my nurses and my patients. I will not, if I can avoid it, operate in a private house, for there I have no control over either nurse or patient, still less over foolish friends. I can best illustrate the extent to which I carry discipline by telling an incident which occurred recently of a kind of which I have had a few, but not many, experiences. For my private hospital I have a rule that when a patient is admitted she must go to bed immediately. A

lady with an ovarian tumor arrived, after a journey of some hundreds of miles, and was asked by the nurse told off for her to go to bed. She said she would not do so until she had seen me. The nurse assured her that I would not come near her till she was in bed. The patient remained obstinate and I sent a message to her that she must either go to bed or go home again, and she elected to do the latter, with much satisfaction to myself. She doubtless thought, and you may think, the rule in question is an absurd one, but the absurdity is only on the surface. It is a test of the patient's obedience and confidence in me, and I know very well that with a patient who begins by disputing my orders and doubting the wisdom of my directions, I could never get on, and therefore it is better for both that we should have an early parting. My nurses I always train myself—in fact, I will not have one who has had previous experience, for I know very well that such a woman will inevitably, to save herself trouble, do something in a way she has done elsewhere, and probably for some purpose altogether foreign to my intention, and will therefore become to me a source of danger and annoyance.

Finally, I give great personal attention to cleanliness in every detail of my work. I trust no nurses or servants without overlooking, and am constantly and at unexpected times turning up carpets, taking down shelves and rooting out cupboards. In this way, and by a process of weeding, I have obtained a large staff of good servants, and have formed a large establishment in which every available precaution is secured. I can give no other reasons than these for my success, and probably they will commend themselves to you.

There are some causes intrinsic to the work itself from which the success has sprung to a large extent, and of which a few words may here be said with advantage. The first of course, is the discontinuance of the clamp, of which I have said a great deal elsewhere. Whatever Sir Spencer Wells may say to the contrary, neither with nor without Listerism would anybody go back to the clamp. But the curious thing is that, from our recent experiences in hysterectomy, it would appear that it is

not so much the clamp that has been to blame as Mr. Spencer Well's method of using it. Hysterectomy must always be a more serious operation than an ovariotomy. But Dr. Bantock has now obtained better results in removing the uterus with the clamp than Mr. Spencer Wells ever got in removing simple ovarian tumours, and we must bear in mind that Mr. Wells always insisted that he used the clamp for his simplest cases with long and easy pedicles. Puzzling over this mysterious and startling contrast, I went to see Dr. Bantock operate, and amongst other things I found he had given up using perchloride of iron for the purpose of tanning the stump. I asked him why he had done so, and he told me that he was quite sure that the use of the perchloride of iron had added greatly to the mortality of the clamp, because with a thick pedicle secured by a clamp it is impossible to accurately close the abdominal wound and prevent draining into the cavity. I did not at once accept Dr. Bantock's explanation, but I determined to use the perchloride no more. Like everybody else, I was prejudiced in favour of the statement made by Mr. Spencer Wells, that a putrifying stump would poison the wound; and therefore I could not make up my mind to allow it to remain without some kind of interference. Years ago, in blaming the clamp for our high morality, I had pointed out the likelihood of this incomplete closure as being one of the causes, if not the chief cause, of death; but I certainly did not suspect the perchloride of iron as being the fatal agent. A few days after my interview with Dr. Bantock I had to perform a hysterectomy, and I dressed the stump with crystals of thymol. The patient died of peritonitis on the fourth day, and that the thymol had trickled into her peritoneum we had proof enough. Since then I have done a hysterectomy without dressing the stump at all, and the patient has done perfectly well. It will be curious, and no less instructive, if we find Dr. Bantock to be right, and that the use of perchloride of iron, the only contribution Sir Spencer Wells has ever made to abdominal surgery, should turn out to be the cause of his tremendous mortality. In any case, it is a remarkable example of how absurdly we are all governed by *à priori* statements

absolutely void of any argument in support of them, and having been made by some one with an authoritative name and position, are accepted without doubt. If Dr. Bantock's brilliant results are obtained by others in the same way, then we have been going on destroying women with perchloride of iron merely because Mr. Spencer Wells said we should use it.

As the whole aspect of abdominal surgery is, at the present moment, controversial—as the progress and practice of this part of our art form the chief objects of my life, you need not be surprised if I have made this address somewhat of a polemic The greatness of the opportunity—the fact that an address given to you will be read where mere utterances of mine would be passed by—obliged me to take advantage of the opportunity you have given me, and to carry on the discussion. The course of this particular line of work has, as you are all aware, taken a sudden bound of activity within the last few years, and the reason is a very simple one. The immense success of the removal of ovarian tumours such as threatened to destroy life with absolute certainty, which followed the efforts of Baker Brown and Keith, led some of us, myself especially, to venture into regions where life was not necessarily, or, at least, not apparently threatened, but where suffering was persistent and unendurable, and where the sufferers had been proved by protracted trial to be outside the powers of ordinary remedial measures. In a recent paper by Sir Spencer Wells, published in the *Medical Times and Gazette*, the argument is completely dislocated and put in an altogether ὑστερον πρoτερον fashion, and therefore I must here give a little attention to the views of that writer. He tells us that ovariotomy had, at one time, a mortality of 70 or 80 per cent., but I know not whence he gets his information. Doubtless it would be possible to find occasional examples of surgeons with a limited experience having such a heavy death-rate, but such an isolated case would not yield a fair statement of the facts. I read a few months ago in an American medical journal that in Italy there had been 100 cases operated upon with 53 deaths, and the newspaper recorded the fact that 34 surgeons were engaged in the sanguinary work. But when the

work of men who can be called ovariotomists is examined, no such results are seen. Charles Clay was the first man who did ovariotomy in England, and his maximum of mortality in his first series of cases was 40 per cent., and it speedily fell to 25 per cent., and this is pretty much what has been recorded by Sir Spencer Wells of his own practice.

In the paper of which I am speaking, Sir Spencer goes on to say that "afterwards, when the strictest hygienic precautions were supplemented by antiseptics, and improvements in operative details were generally adopted, success became so great that ovariotomy not only took its stand as by far the most succesful of any capital operation in surgery, but the risk attending it in a favourable case could truly be calculated as little, if at all greater, than that attending any case of natural childbirth, and, as a necessary consequence, early operations can be advised with less hesitation." The statements in this quotation are wrong from beginning to end. In the first place, the mortality of ovariotomy in the hands of Keith and myself still remains at or about three per cent., and we have shown the least mortality yet available. The mortality of natural labour, on the other hand, is certainly not ·25 per cent. The statement that a diminished mortality has led to early operations ought to be exactly reversed, for it is the early removal of tumours and the discontinuance of tapping which have largely contributed to our present splendid results. Sir Spencer Wells' teaching inculcated the practice of tapping and its repetition until the patient was within measurable distance of the grave, but his successors have reversed all this with infinite advantage to their patients, and we now look upon tapping as a sort of surgical crime. The material alteration in practice led us, step by step, in the direction I have indicated, and we began to discuss the greater advantage to which I have just alluded. Every specialist is familiar with the large class of miserable women who wander about from hospital to hospital, or from consulting-room to consulting room, seeking relief from their ailments unavailingly.

Let me take the first class to which Sir Spencer Wells alludes in his recent paper on cases of uterine tumour. There

can be no doubt but that there are hundreds of uterine tumours that give no trouble at all, but these are not the cases that come to us. If a woman has no pelvic trouble, she does not present herself to the gynecologist, and if she has a uterine tumour which gives rise to no symptoms, that tumour, of course, remains undiscovered. But when she suffers from distress occasioned by pressure on viscera, from severe hemorrhage, or increasing size, she comes to us and asks for advice. Suppose we find her suffering from a uterine myoma, what are we to do? The answer to this question is like the answer to every other of a similar kind. If the tumour is small, the woman comparatively near her climacteric, and the hemorrhage such as can be moderated by rest in bed and the use of ergot, then she can be advised to let the tumour alone; but if the woman be not near her climacteric. and the hemorrhage does not yield to treatment, especially if, after a fair trial of treatment, the tumour is found to be actually going on, then surgical treatment is demanded.

Of course, each practitioner of medicine does, and always must, carry on his work in his own way, and there can be no doubt that within certain limits the measure of his success stamps the rightness or the wrongness of his methods. James Syme used to teach us that there were three methods of conducting professional business, but that there was only one way to real success. He said there were three interests involved. The first in order is that of the patient; second, that of the professional colleague; and third, that of the practitioner himself. Syme insisted that the several interests should be rigidly kept in the order in which he placed them, or things would be sure to go wrong. I have never heard sounder advice. I have never lost sight of it, and so far as within me lay I have striven to follow it. In the proposal of a new proceeding two dangers clearly occur. The first is that of the enthusiastic upholder of the novelty; he may be disposed to run too fast on the new line. The second is that of the obstructive who, merely a believer in the times that are past, can see no possibility for their improvement. For the first danger the remedy is a wholesome scepticism, leading into just and careful criticisms; the

remedy for the second is more difficult, for it involves the patient endurance of much misrepresentation, and a protracted combat upon the points of criticism which have no weight in themselves, and have an importance gained only by persistent reiteration. In the line of practice of which I am about to speak, the point most persistently urged against our new line of practice is that unnecessary operations are performed. Now, this is an argument which it is extremely difficult to argue upon, because those who speak on the two sides of the question start from altogether different standpoints. Those of a past generation, like Sir Spencer Wells, apparently regard it as justifiable to perform operations in this department of surgery only when life is pronouncedly in danger; we, on the contrary, of the younger school, believe we are justified in extending our practice for the relief of suffering, and we regard this as a higher function than that of the mere saving of life. To end the discussion on this point, I would point out that our critics endeavour to apply an arbitrary rule for the repression of abdominal surgery which has never yet been applied in any department of the art. Let me ask, if we find a man suffering slightly with the early symptoms of a small calculus, do we not at once proceed to relieve him by removing it from his bladder? In fact, in the domain of what is called general surgery, has it not become the established practice to perform operations which are accompanied by very considerable risk of life merely for the rectification of deformities, such as bowed-legs and knock-knees, which have not the remotest risk of life attached to them, and which involve no kind of suffering. The ultimate court of appeal comes then to be the patient's own decision, and I do not find that persons prefer to go on suffering pain and the disabling effects of profuse loss of blood rather than submit to a surgical operation, the details and effects and ascertained risks of which are completely and candidly placed before him.

In the treatment of uterine myoma two alternatives occur, and these are both the subject of very hot discussion on my own side of the Atlantic; they are the removal of the uterine appendages, and the removal of the uterine tumor itself by the so-

called supra-vaginal hysterectomy. No one in Europe, at least only one so far as I know of any importance, doubts that removal of the uterine appendages arrests menstruation completely in the great majority of cases, arrests the growth of uterine myoma generally, and in many instances causes it to entirely disappear. Mr. Knowsley Thornton, Dr. Savage, Professor Hegar, myself and others, have reported numerous cases in detail. I have published a long series in the *American Journal of Medical Science*, but Sir Spencer Wells dismisses us all in the brief sentence: "Vague, unsupported assertions have little influence upon the opinion of a thoughtful or a sceptical profession." Sir Spencer Wells must pass his retirement in some other occupation than in perusing the modern literature of his specialty, and therefore his criticism need hardly engage our attention.

The great majority of cases of uterine myoma which come to us for surgical treatment can be quite satisfactorily dealt with, and it is an operation having a small and steadily diminishing mortality. Since 1878 I have performed it many times with few deaths, but am unable to give the exact figures just now. The arguments used against it are, first, that of its mortality, but this mortality is the inevitable result of early work, and is therefore not a permanent objection. It was an objection urged 25 years ago against ovariotomy, but it no longer holds good against that operation. The second objection is that myoma itself is not a fatal disease, but this argument is not in harmony with my own experience. Even if it were a just one, however, it is admirably met by the plea entered at Ryde by Dr. ——, of ——, in the discussion of my paper on the subject, to the effect that it is to the rights and relief of the majority that we must have regard, and that the function of our profession does not end with the saving of life, but is chiefly that of relieving suffering. Two other objections have been urged generally against the removal of uterine appendages—that it sterilizes and destroys the patient's sexual appetites. Of course, a woman is completely sterilized by a uterine myoma ninety-nine times out of a hundred, so that the process of complete destruction of fertility is a matter of little moment. The other objection has been

shown to be perfectly groundless, but even if it were not so, it could hardly be urged on the ground of morality that a woman should go on suffering because she ought not to suffer any diminution of that animal propensity which it is the chief object of the higher life of all religious culture to subject, and the subjection of which forms for all creatures the greatest difficulty in existence.

There are cases of myoma demanding surgical treatment upon which removal of the uterine appendages seems to exercise no satisfactory influence. Mr. Knowsley Thornton has made a very valuable suggestion—one which certainly deserves very careful consideration—that all cases of myoma requiring interference are first to be subjected to the removal of the uterine appendages, and then to subsequent operation if it should be necessary. The only objection to this I can offer at present is an incomplete one. I have pretty well satisfied myself that there is one form of myoma on which removal of the appendages exercises no control. This variety I have named the soft œdematous myoma. But it is not easy to recognize this form of tumor until after it has been removed. Again, there are a few cases, very few I have found them to be, in which the appendages cannot be removed, and we must proceed to hysterectomy. Finally, the removal of uterine tumors has had such brilliant results in Bantock's hands that I am in hopes that a new era for hysterectomy is being opened out.

Another class of cases wandering about after relief are those upon whom I have operated in large numbers, and have found chronic and incurable disease of the appendages in the form of chronic inflammation of the ovary, chronic inflammation and occlusion of the tubes, these latter being occluded and distended by serum, pus or blood. When I first published my work on this subject there was, of course, a large amount of incredulity expressed about it, and this incredulity was not much lessened by the exhibition of a large number of specimens at various societies, and their permanent exhibition in the museums of the colleges of surgeons. Many, particularly amongst my metropolitan brethren, loudly asserted that there were no such diseases,

and Mr. Spencer Wells stated at the International Medical Congress in London that if such cases did occur they must all go to Birmingham. But Dr. Kingston Fowler has shown not only that they exist in London, but that they are far more fatal than I had any idea of, and that they have been and are overlooked and misunderstood in the metropolis just as they were overlooked and misunderstood in my own practice previous to 1878. Concerning this incredulity, please distinctly understand that I don't blame anyone for it. It is a necessary part of all human progress. I do not even blame my metropolitan brethren, as they seem to think I do, for not discovering these cases and properly treating them. That is the fault of the mechanical school of gynæcology established by Simpson, and which still exercises a far too great influence over this department of our art. During the last twenty years displacements have had a great run, just as before that time everything was put down to ulceration, and no man considered himself properly armed for the treatment of disease unless he carried a speculum and a caustic stick with him in his gig. The mechanical school revels in the sound and pessary, both useful enough instruments in their proper places, but, when misused, capable of endless mischief, for many of the so-called displacements are now known to be constituted by chronically inflamed and adherent tubes and ovaries which can be relieved by removal only.

You will ask me, at starting, to tell you how this disease may be recognized, and I have to answer that their diagnosis cannot now, and probably never will, be a matter of certainty. They begin generally in some acute attack of pelvic inflammation, from which the patient dates all her troubles ; and when you get such a distinct history you ought at once to be on your guard. This illness may have arisen, for instance, in a closely-confined and confessed attack of gonorrhœa ; or it may be an attack of pelvic perimetritis, occurring after a miscarriage or a labor ; or it may have arisen in one of the exanthematic fevers or a simple cold. In some of the cases, however, you get no clear starting-point in the history, and then the diagnosis is generally more difficult. The symptoms are usually precise enough, yet, unfortunately,

none of them are peculiar to the condition of which we are speaking. Pain is, of course, a leading feature ; indeed, it is rarely without pain as a chief incentive that patients consult us at all. This pain is complained of as being constantly present, greatly aggravated by walking, and becoming intense for some hours or days before the period, and lasting throughout its continuance. Menstruation is usually too frequent and too profuse. In the great majority of the cases the uterus is somewhat fixed, and a tender mass can be felt on one or other side of it, perhaps on both sides and behind it. When the tubes and ovaries are down behind the uterus and adherent there—and this is by far the most common condition—the diagnosis to a beginner is very difficult. Nothing looks more certain and easy than the diagnosis of subinvolution and retroflexion, and without further consideration a pessary is introduced, with no other result than that of aggravating the patient's sufferings—in fact, I may say that at this point her troubles will begin to be serious, and she will wander about to collect various kinds of instruments from various practitioners, until she ends either a helpless and hopeless invalid or dies from an attack of acute peritonitis. In some of my most marked and most successful cases there have been no physical signs whatever, and I have felt myself reluctantly justified in interfering only by the manifest reality of the patient's sufferings.

Here let me just say a word about the much discussed question of subjective symptoms. Everyone has heard the celebrated story told of Liston—that a hysterical girl persuaded him to remove a healthy limb for supposed disease of the knee joint. But is there any other story of the kind known ? If there is I have not come across it. We certainly do meet with women who will tell the most extraordinary and incredible stories about their sufferings ; but the stories are so inconsequent and contradictory that there is no difficulty in discounting them. Besides, they have no support from the presence of corresponding physical signs. A woman whose story is real has a sequent narrative, and she will submit to treatment ; while the woman who is a humbug flies off in a temper the moment the suggestion is made that she should submit to an operation in which she

risks her life. I have never yet known a woman submit to an abdominal section in whom I did not find abundant justification for its performance, even in cases where I had been extremely doubtful about its real necessity before I undertook it. I have known many patients to whom I have made the proposal as a test of their reality, and who have, much to my satisfaction, speedily taken themselves off to some other practitioner.

Of the details in the operations in these cases I have no time to speak. Indeed, I could deal with them satisfactorily only in a series of lectures. Suffice it to say that the operations are extremely difficult, for the structures are always very adherent, and the operator has nothing to guide him save the erudition of his touch. Concerning the cases of occluded and distended tubes, some of my critics have suggested, without any experience, that something short of abdominal section might suffice for their successful treatment, such as tapping the tubes from the vagina. But a trial of this proceeding long ago satisfied me of its impractibility and its uselessness, and my growing experience confirms me in the conclusion that we have no alternative.

I am often asked concerning the subsequent history of these cases, and I am able to say I have published the details that the great majority of them are relieved at once and completely by the operation. There remains a tenderness of the stump in some of them for some months. In four very bad cases fœcal fistulæ formed, but in two the sinuses have healed and the patients are perfectly well. In the third case the fistula opens still at occasional intervals; and in the fourth case, by far the worst I have ever had, the patient being literally at death's door when the operation was performed, the fistnla still remains, some twelve months after the operation, but even here her health has so greatly improved that I am hopeful of its permanent closure in time.

I have occupied your time already at too great length, and yet have left myself no time whatever to speak of a great variety of topics within the limits of the subject of my address of which I fain would have spoken—subjects entirely novel,

and full of the deepest interest alike to the practical surgeon and to him who takes but an interest of a literary kind in the progress of our art. In fact, it is a matter of regret to me that I cannot address such an audience as this in a series of lectures rather than in an address which must necessarily be brief. It is one of the great defects of a position such as I hold—a defect inherent to a special line of practice—that it practically shuts out its follower from any chance of being a teacher. Besides this, I feel strongly as acting to my own prejudice, and I am certain it is a misfortune that those who, like myself, are very largely engaged in work strictly limited to a department, can never communicate as successfully the results of their experiences as can those who are engaged in teaching. I regret, therefore, that I must pass over without mention the important field of new work which has been opened up within the last few years in the surgical treatment of the liver, spleen, kidney, and intestines. I cannot even stop to speak of many other less striking, but no less important subjects, such as the treatment of pelvic abscesses by abdominal section and drainage, though all these are of less importance, in so far that they excite but little hostility ; and what I have to say further to you I propose to limit to a brief discussion of a proposal made by Dr. Rowland Battey for the production, artificially, of the menopause for the purpose of indirectly benefitting patients from conditions more or less neurotic, the symptoms of which are apparently influenced by the recurrence of menstruation. It must be perfectly clear to the most casual observer that this is a field of an extremely ill-defined character—one which, at first sight, offers very intangible prospects of success, and in which the indications even of success must be very vague and indefinite. There can be no doubt that a large number of women suffer in such a way as to make it perfectly clear that if they were relieved from recurrent menstruation they would be improved materially, but there can be as little doubt that the application of this idea—in itself a brilliant one—requires the utmost care. I have no sympathy with stupid obstructionists who, because they scent danger in the air, would absolutely pro-

hibit its application; but I have sufficient regard for the expression of every kind of professional opinion to recognize the necessity for the full exercise of caution. When the proposal was first made, I recognized this so fully that I selected for whatever experiments I should make in this direction a disease concerning the reality of which there could be no doubt whatever: I mean epilepsy. It is a perfectly easy thing to recognize by two facts alone any case of genuine epilepsy from mere hysterical imitation. It was, I think, Dr. John Hughes Bennett who clearly established the facts that none but the true epileptics ever seriously hurt themselves during the attacks, and that after the fits are over the epileptic is always somnolent. It is certainly the case that in a large number of cases of epilepsy in women the incidence of the disease is concurrent with menstruation. It is also true that every epileptic woman, certainly whose case I have investigated, is worse during the menstrual week than at any other time. In some cases the epilepsy is absolutely limited to those days of the month during which the menstrual flow is in existence. It was, therefore, a perfectly easy thing to select a number of cases in which the experiment of Battey's operation seemed capable of justification. For the purpose of trying the experiment I selected six cases, and to these I have absolutely limited its application, though from the number of cases which have been sent to me for the specific purpose of having the operation performed, I suppose I might have been able by this time to have placed several series of attempts on record. The reason of my careful restriction has been that I did not care to prejudice the results of my other work by complicating it with what seemed to me a doubtful kind of proceeding, but all my care has been to some extent fruitless, for I have been persistently charged by a certain class of writers with having performed a large number of useless and unnecessary operations in removing normal ovaries from women suffering from nervous disorders. Indeed, so late as July 5th last, Sir Spencer Wells wrote the following sentences which, though they may have been intended for some one else, I cannot but suspect were levelled at me. They are as follows:

"Just now something more than a word of caution against rash, dangerous, and unnecessary operations is called for. We are startled by the reports of the removal of normal ovaries of young women suffering from nervous disorders, which may be exaggerated or imaginary; and it is to be feared that our professional honour is at stake, and that abdominal surgery in its latest developments is open to the denunciation hurled against the earlier ovariotomists, and that with more reason than in 1850. Lawrence's question must be repeated, whether such operations can be encouraged and continued without danger to the character of the profession, and West's assertion that the fundamental principle of medical morality is outraged, cannot now be satisfactorily refuted."

Though I am fairly familiar with the literature of abdominal surgery during the last ten years, I am absolutely ignorant of anything which can possibly justify such ridiculous exaggeration. I have publicly challenged Sir Spencer Wells to indicate the proceedings to which he alludes, and to produce the evidence upon which he bases his charges; but up to the moment of my leaving England he had not taken up the gauntlet. It is a somewhat remarkable fact that, in another journal of the same month, the same writer actually pleaded in favour of the removal of tubercular lungs, that such an operation would be justifiable if it saved one patient in twenty of those operated on, and it seems to me absolutely impossible to reconcile such a recommendation with the denunciation I have just read. So far as my own work in Battey's operation is concerned, in not a single one of the six patients operated upon were the uterine appendages normal. Two of them were carefully investigated by independent observers, one of whom was the well-known and accomplished pathologist, Mr. Alban Doran, by whom the patients were fully described, and they were figured in the *British Medical Journal*.

The results of these operations were, in the first place, that all the patients made easy and uninterrupted recoveries; the operations were performed after the most careful consultation, and with the full cognizance on the part of the patients and their

friends of the results which were certain, and the entirely speculative nature of those it was hoped would be obtained. As I have already published the cases in detail, with the exception of the last, which was only performed a few weeks ago, I need not here repeat them, save in general terms, and that is to the effect that in two cases the results are such as to completely justify the proceeding. In both of these the disease before the operation was so intense that it was threatening life, but now it is almost entirely subdued, and the health of the patients has been enormously improved. In one case, the disease was arrested for a year and a half, and though it is now returning the patient has been transformed from a wretchedly, feeble and broken-down girl into a healthy and robust woman, although affected by epilepsy almost as badly as before. In two others, the disease has been greatly modified, and the health of the patients has been immensely benefited.

From this brief record it is quite a matter open for discussion as to whether the continuance of the proceeding can be recommended, and I am bound to say that I have not mself a very strong opinion in the affirmative ; but I think, if I had a daughter with feeble health, the result of pronounced menstrual epilepsy, I think I would advise her to have the operation performed. From what I have seen of it myself, I think there can hardly be any risk about it, and if performed with the precautions indicated, I do not think it can be brought under the sweeping category of Sir Spencer Wells as being either rash, dangerous or unnecessary. There is another argument, and I think one that may be said to have some moral force, in that it will assist in the prevention of the distinctly pronounced hereditary tendency of the disease, and we should at least hesitate before we entirely condemn it. Certainly a great deal more can be said for it than for the proposal of pneumonotomy for phthisis, on the assumption that the removal of a lung would only save one patient out of twenty. Removal of the uterine appendages for epilepsy would probably not kill more than 1 per cent., and I am certain it would materially relieve 50 per cent. ; it would improve the health of the great majority of patients, and I don't

think it would make any of them worse than they were before the operation. I am hopeful, therefore, that the verdict of professional opinion will not be averse to a fair and reasonable trial of Dr. Battey's proposal, and I trust that the freedom from the prejudice and the shackles of tradition which we find on this side of the Atlantic will secure for it a fair field.

And now, in conclusion, let me thank you most sincerely, and not only you, but many other professional bodies and large numbers of professional friends, for the kindly, I may say overwhelming, reception I have met with at your hands. For many months before I left home, there arrived hardly a mail which did not bring me invitations to partake of public or private hospitality, and these kind expressions of regard brought forth feelings of deep regret that my stay here could not be prolonged for as many months as it is limited in days. There is one thing in this reception I recognize above all others, and it is, that you are treating me not on account of any merits of my own, but as the representative of a large body of men in my own land to whom you have owed much in the past, and with whom you are in the present united in a common bond of brotherhood and community of sacred purpose. I predict that in the future this union and unity will be more and more complete.

That it ever should be endangered would be a disaster for humanity. As the blunder of a century ago, which severed from the old country her most prosperous children, kept the whole progress of the world in abeyance for nearly two generations, so any future instance would be more disastrous still. God grant that we may never see it.

PRESIDENTIAL ADDRESS, CANADA MEDICAL ASSOCIATION.

By Dr. SULLIVAN, Kingston.

Gentlemen of the Canada Medical Association and Gentlemen,—It is with feelings of no ordinary diffidence and trepidation, I assure you, that I assume the exalted position your generosity prompted you to confer on me, and these are increased to embarrassment when I view the unusual circumstances attending our meeting to-day. The time, the place, and, above all, the presence of so many distinguished strangers, all unite to render it the most memorable in our brief annals; and while I feel as proud as any one possibly could, to fill so honorable a position, I feel bound to acknowledge that my anxiety tor the honor of Canadian medicine makes me wish that some of the Nestors of the profession had assumed this portion of my duties. However, I feel I shall be sustained by that small but honored number who, in their zeal and devotion to science, as well as in the inspiration of a pure and noble patriotism, founded this organization and watched over its infancy, and whose fostering care guided it to a healthy adolescence. Be assured, gentlemen, the generous spirit which prompted you to place me in this position in preference to many others better entitled is fully appreciated, and will constantly nerve me to greater effort. I feel the profession has no higher honor to give, and if I cannot add to its laurels, will take care to return it as bright and unsullied as I received it from you.

Gentlemen, eighteen years ago the scattered political divisions of this great territory, feeling their isolation was unnatural, and actuated by that spirit of ambition without which a nation, equally as an individual, is dead, and, moreover, anxious to more fully test the solidity, enterprise and capacity of the monarchical principle of government, under which they had grown and prospered, felt that the time had arrived when, united, they would form the nucleus of a great nation, that no longer the barriers of prejudice and provincialism should separate them and retard their growth. Accordingly, animated by such sentiments, without passion, bloodshed or battles, they joined hands, and in a manner becom-

ing the eldest children of Great Britain, consummated a union in as pleasant and joyful a manner as a marriage ceremony. Full of peace and good-will to all, they stood up in their might, and in the consciousness of a healthy maturity demanded admission to the comity of nations. Never before in the history of the world had such a scene been witnessed. It was a proud day for even the greatness of Britain to acknowledge the grandest epoch in the history of her great colonial progress and the greatest tribute ever paid to the free, liberal institutions of England. No sooner had this been accomplished than the medical profession, representing, to a large extent, the science, culture and civilization of its people, felt it was their duty to exhibit that spirit of unity and friendly intercourse characteristic of their profession, that the time had arrived to collect and utilize the stores of science of so extensive a territory, and lay the foundation of this national association, which would be representative in character and add to the general stock of knowledge, and under whose protective influence the power of the profession would be increased and extended, and its members afforded an opportunity to know and respect each other. Animated thus by no selfish or sectional motives, it gave its first-fruits generously to strengthen and adorn the new nation—so that, gentlemen, when we meet for professional advantages, we also commemorate an important national epoch and afford an opportunity not frequently enough given, to assemble where no religious, sectional, social nor political prejudices can be tolerated. Two principal objects, gentlemen, remind us in each revolving year, to attend these meetings. 1st, Social, friendly intercourse—this must, to the profession of Canada, for many years to come, be the most potent attraction. We, by a very large majority, belong to the class called general practitioners. A brilliant, but unfortunately very small, minority of specialists add a more scientific tone to our meetings, and shed lustre on our proceedings, but the attendance must for some time to come be recruited from the ranks of the general profession, and to none is the summons more agreeable, for none toil more faithfully and constantly than we. How gladly, then, must we hail the announcement of this meeting.

What a splendid excuse to give to exacting patients; how delicious this pleasant, social intercourse, how cooling to our brain, and how refreshing to have some sympathetic ear to listen to our troubles, doubts and perplexities; with what zest we enjoy the hospitalities of the profession in each locality, how necessary it is to keep one's mind as it should be—broad, free and liberal. Yes, gentlemen, self-conceit, egotism and narrow-minded bigotry are the products of isolation, reserve and privacy; without some variety we degenerate into mere creatures of routine. On the other hand, this fraternal intercourse enlarges the mind, dispels prejudices, cultivates charity and humility, and develops that genial, warm-hearted philanthropy that makes the physician, as he should be, the highest example of intellectual, moral and social culture. Other professions admit of opportunities for display, with all the brilliant accessories of forum, court or pulpit, but medicine offers no such arena. It belongs to private life. Weary with toil, watching and anxiety, the physician has no sympathizing audience to cheer him on, no brilliant assemblage to arouse his enthusiasm or applaud his acts. Many of his deeds, which, if publicly exhibited, would delight and charm and bring him honor and fame, are performed in the quiet stillness of the night in some low, dingy tenement, his audience often an old crone, who, in the fulness of her heart, may exclaim, "Well done, doctor; I always thought you were lucky!" Really, we should be disposed to pardon some infractions of that rigid etiquette which forbids him to use the publicity of the secular press so freely allowed to every other profession. To those who have passed through such scenes, what a great relief it is to come here, to renew old friendships, form new ones, relate the cases we have had and the wonderful recoveries effected, so often told that we believe them ourselves. How joyfully we return home, and how refreshed and invigorated we pick up our work and go on our way rejoicing. Yet another and more important attraction brings us to this meeting, viz., scientific progress—to communicate the results of our observations, the aims and objects of our labors, the interchange of experience, our ideas on the various professional subjects to which we have given thought and time, our opinions on the

truth of the various theories advanced, contributing by articles or discussions, stimulating the growth of a spirit of research, observation and experiment, which may bring fame to ourselves, honor to our country, or add to the general stock of knowledge. True, we may have no new theories to propound. discoveries to announce, nor principles to enunciate, yet do we add to the general advance.

The history of all progress in science teaches that the labors of many minds, for many years, are necessary for the discovery of any truth, and although one gets the honor, yet are the works of many indispensable to him whose good fortune it is to crown the work. Galileo, Kepler, Bacon, preceded Newton. Priestley, Galvani, Volta, Lavoisier, led up to the great chemical discoveries of Davy. Sylvius, Fabricius, and, above all, the monk Michael Servetus, did as important service in the great discovery of circulation as Harvey. Another fact, gentlemen, consoling to us is, that the greatest results often follow from the simplest discoveries—inventions which apparently require no great intellect. Thus the discovery of percussion by Avenbrugger in 1761, and the subsequent surpassing one of Lænnec, though purely simple mechanical inventions, had more influence on the development of modern medicine than all the systems evolved from the brilliant intellects of the 18th century, of such men as Booerhave, Van Sueten, Hoffmann, Stahl, Haller and Cullen. And the most scientific and exact method or school the world ever saw, the modern German school, acknowledges as its founder Johann L. Schonlein, and dates its origin from his apparently small discovery of a parasitic growth in a disease of the hair in 1839. It may, no doubt does, seem simple to many of you to mention such facts ; but you will pardon me when you remember I am speaking to many who, like myself, require such examples to urge us on to work. The great territory we are scattered over makes communication difficult, and many have, as I know, from listening here, been prompted to observe more closely.

My first idea, gentlemen, in thinking over a subject likely to be of sufficient interest to you, and within my powers of description, was to give a brief retrospect of surgery since my entrance to the profession, twenty-six years ago. After the expenditure

of much time, I found it too hypnotic even for myself. Fortunately, a kind mentor said, "To the sections belong such subjects. To you, as President, belongs the duty of noticing such subjects as are of general interest to the profession in this country, and will evoke from the society opinions which their importance demands, as also a brief review of the general progress since our last meeting." I need hardly say his advice was peculiarly grateful, and I have endeavored to act on it. Invoking your indulgence in listening, as well as your counsel and experience in disposing, we will proceed to consider them.

About a month ago I was presented with a book usually looked upon with repugnance—a blue book; it was a portion of the census of 1881, the last one taken, and just published. I found some facts therein, possibly not new to you, but new and surprising to me. I found the population of the whole Dominion to be 4,324,876, scattered over an immense territory. Of this Ontario has 1,923,228, Quebec 1,359,027, the balance being divided among the other Provinces. I found the death-rate varied a great deal without any reasons given: from 11.81 per 1,000 in Ontario, the healthiest; to British Columbia with 20.35, Quebec following closely with 19.07 per 1,000 persons. On looking at the totals, I was astonished to find Ontario, with nearly 600,000 more population, had some 3,000 deaths less per annum than Quebec, the figures being—Quebec, 25,939; Ontario, 22,727. Population considered, the difference is simply enormous. In looking for causes, I found that this excessive death rate in the Province of Quebec was due to the great mortality among children, the deaths from 1 to 11 years being more than sufficient to explain the discrepancy; that it is truly a "slaughtering of innocents" the figures will explain. For the first year Quebec, 8,350 deaths, 1,000 more boys than girls; Ontario, 5,418 deaths, 760 more boys than girls. Quebec, 5,016 deaths, 300 more boys from 1 to 4 years; Ontario, 3,080, with 200 more boys during same year. Next table, from 4 to 11 years, we have 2,776 deaths in Quebec, and 22 more boys, while Ontario, for same time, has 1,973, with 43 more boys, making a grand total of 16,142 deaths in the Province of Quebec from

1 to 11 years, and a majority of 1,290 boys, while for the same period Ontario has only 10,471, and a majority of 973 boys. Their totals are 22,613, with 2,263 boys. The difference in favor of Ontario, without reference to population, is the large one of 5,671. Were it not an official document, carefully prepared, I would not believe it; it is a matter which concerns all the provinces, but the fair fame of the Province of Quebec is particularly impeached. It is also eminently proper that through this Society our statesmen may consider so important a matter, if only from an economic point of view, and prescribe a remedy.

Sir James Paget, in an address before the International Health Exhibition last June, on "The Relation between National Health and Work," containing a vast amount of carefully calculated statistics, in eloquent, graphic language describes the loss to Britain, and says with reference to preventible diseases: "No one who lives among the sick can doubt that a large proportion of the sickness and loss of work might have been prevented, or can doubt that in every succeeding generation a larger proportion still may be avoided if only all will strive that it may be so. Smallpox might be rendered nearly harmless by vaccination; typhus, typhoid and scarlet fevers and measles might be confined within very narrow limits; so, probably, might whooping cough and diphtheria. The greater part of accidents are due to carelessness. Diseases due to bad food, mere filth, or intemperance, so far as self-induced, might, by virtue and self-control, be excluded, and with these, scrofula, rickets, scurvy and all the widespread defects attributable to them could be greatly diminished." When I give you some of the diseases, you will see how peculiarly apposite his words are. I only took the diseases showing the most marked contrasts or differences, and you will see how, without any intention on my part, they fall under the head of what Sir James Paget and everyone call "preventible." They make the case very strong against Quebec. I read Sir James Paget's lecture after I made out the annexed table. Bear in mind this only takes notice of deaths. Think of all the sickness they represent, the loss of work caused, and the enormous waste, the result of these diseases:

Smallpox	46	714	760
Diphtheria	1,271	1,599	2,870
Teething	108	2,359	2,467
Diarrhœa	294	285	879
Cholera Infantum	181	344	225
Diseases of Throat	56	406	462
Do. Brain	696	1,049	1,749
Fevers—Scarlet	561	961	1,537
Typhoid	594	1,081	1,612
Croup	556	574	1,130
Measles	375	341	716
Consumption	2,398	2,282	4,680
	7,136	12,295	

Apart from any humane or Christian principles, look at the enormous loss to the state, to a country such as this. Sir James Paget values each child at $40, and is ashamed to use so low an argument as expediency in favor of the saving of life and health ; he only does so because sufficient motives are not found in charity, sympathy and the happiness of using useful knowledge. It comes with peculiar good grace from this body to sound the trumpet note of alarm. Ontario may, no doubt is, only less guilty. Some extraordinary causes of mortality among children must be in force ; think of the great loss of 714 deaths from smallpox. It is a positive disgrace. If the people will not be educated to use proper means, the law should command and enforce its command. This is an age of commissions, when every contravention of political honesty is sifted. Let a commission investigate this ; it demands it more than anything else. Wipe out the disgrace, confer health on many, and thus bring wealth to the country. We must remember, too, how much we injure ourselves by keeping foci of highly contagious diseases constantly on hand, ever ready to enlarge their baneful effects on the approach of exciting causes, and repel the tourist and settler from our shores.

It reminds me also how necessary it is to have vital statistics constantly collected ; how important they are for the comfort, welfare and advance of a people will readily appear from what I have said. It is time that Canada had a bureau, and I hope you may be called to pronounce on it. The number of physicians is put down at 3,507 for the Dominion ; Quebec has 1,065, Ontario 1,718 ; proportion for Quebec, 1 physician to 1,276

persons, Ontario 1 to 1,110. We have over 900 students, distributed among eight medical schools—four in Montreal, two in Toronto, and one each in London and Kingston, ample to meet all our requirements. Compared with our neighbors, we are far behind in production. They have by last returns, 1882-83, 119 medical colleges graduating 4,000 doctors yearly and having 12,000 students, so that marvellous as is their growth, great as are its prospects, resources and wealth, the medical production keeps pace with it. No part of the habitable globe is better supplied; the average is 1 to 524 all round. Indiana, with the same population as Ontario, has 4,993, or 3,275 more doctors. Forty-two schools in the North-Western fifteen States sent out in three years 5,364 graduates, and have 3,549 students preparing. The large cities show from 1 to 260 in Denver to 1 to 548 in Chicago. They have 90,000 doctors in regular practice, and only 8,300 are above 60 years of age.

An important duty of mine, gentlemen, is a glance at the condition of the profession in Canada, and it naturally comes under two heads: 1st. Is it as efficient as the responsibilities and the progress of science demand? 2nd. Is it uniform throughout the provinces? and, if not, what can be done to bring all up to the level of the highest part? Gentlemen, without the fear of contradiction and with the firm belief of being able to prove what I say, I maintain that the standard of the medical profession in Canada is equal to that of any other land. Great excellence and distinction we cannot claim. The paucity of our numbers, the vast extent of territory, the exacting demands of our time, the absence of any great wealth, above all, the youth of our country and the great attractive power of our neighbors, plead powerfully in extenuation. Nevertheless, the average will compare with any. High-minded and upright, honored by his fellow-citizens, the physician acknowledges no superior. I point with confidence to the profession of this city where we are assembled, and say "*Ex uno disce omnes.*" We will be satisfied with the example. With this our schools have much to do. They all require four years' study, and all a preliminary examination of different grades of severity. We think, in fact we are sure, we have four times too many schools, yet

their competition has been friendly ; a generous rivalry animates them, the " *Sacra fames auri* " has not seized them ; no underbidding by offering advantages to students of easy terms—rather a desire to excel and render their course practical animates them. That this is so, hear what the leading medical journal of the United States says of them :—" There is now, and has been for some time, a tendency towards the practical in Canadian medical teaching. While didactic lectures are given with greater care and zeal than ever, there is added that other great factor in medical education—observation. The various schools vie with each other in the practical department of the work. The anatomy is being taught by constant demonstration, the microscope is placed in the hands of every student, and the test tube is as familiar as the scalpel. When we look at the careful manner in which both theoretical and practical teaching are given ; at the high standard fixed by the different curricula, it must be admitted their schools are turning out a very efficient class of practitioners." It is very gratifying to have such an opinion from so high an authority, and shows we need not be ashamed of "seeing ourselves as others see us." Moreover, gentlemen, a class of men are studying who, as was the case some years ago, are not compelled to go to work at once, but who, thanks to industrious parents, are enabled to devote more time to professional training, who can follow the bent of their scientific inclination and slake their thirst at the fountains of medical thought and experiment in Europe. They find it pays. From that class, annually increasing, we expect much ; they are true to their country, glad to work for it, and their reward will come. And, gentlemen, these remarks remind me that it will not be considered invidious if, in passing, I should express the profound respect and affection the profession feel for the medical schools of this city. It was a great satisfaction to all to learn the good fortune of the medical department of McGill in securing an endowment—the first in Canada to obtain one. Its teachers have been strong supporters of this society from its inception. Its managers, placing their veteran professors gently to rest on a well-earned fame, have wisely selected to fill its chairs a number of young men filled with the Prome-

thean fire—ardent, enthusiastic students; thus hope and confidence are inspired in its future. Its endowment, too, is worthy of note. It is a public recognition of the excellence of the work done and a tardy recognition of the strong claims of our medical schools on the patriotism and munificence of the country. We of the West, where so many of her alumni are pushing her fame and their fortunes, have nothing but warm congratulations to offer. We rejoice in her prosperity, and hope no narrow lines of sectional prejudice will ever prevent us offering honor to those who deserve it. The other schools, too, are doing good work, and worthy of compliment. With reference to the uniformity of medical standard, I may say I hold it with many that it is the duty of the state to see that men well qualified to meet the serious responsibilities of the profession shall be found in every village and hamlet throughout the land. Our profession is too intimately mixed up with the people not to require a law, and a stringent one too, to regulate the right to practice; and while schools award degrees and honors to the zealous, faithful student, the state alone should say who shall or shall not guard the interests of the sick, the safety of its subjects. The matter comes under the head of education, and is, therefore, a state right. Then all you require is to imitate the example of Ontario, and place the profession in the position it is in there. Those who see how ardently the profession of the United States and the English sigh for such a law can only feebly realize its value and importance. Your power, gentlemen, will be immense if united. Surely, in such an agitation, the descendants of Paré, Bichat, Magendie, Bernard and Dupuytren will not fail to assist, when they remember the glories that cluster around the French school, that they are the representatives here of that land of science, art and culture which for hundreds of years enlightened the world of medicine; they will not hesitate, more particularly when they will have the regulation of such a system. Permit me, as there are so many strangers here to-day and as an incentive to urge on the gentlemen from Quebec, to repeat, in a few words, how and what Ontario has accomplished. Her first act dealing with medicine was passed in 1817, then Rolph's

act in 1824, and from that time down to the amended act of 1874 many acts were passed which it will be unnecessary for me to refer to. By that act Ontario leads the English-speaking world; she has in active operation to-day what the United States sigh in vain for and England is struggling for. Previous to that act three bodies possessed the power to license, or rather to recommend, for the governor really was the fountain of authority; they were what I call "regulars," "irregulars" and "defectives"—the colleges, homœopaths and eclectics. In vain look for any advance so long as there were three, and these antagonistic, having no respect for, but rather hating, each other. If one made it difficult the other could make it easy; no hope for the future. Various were the stories told of how doctors were made. All looked dismal and unpropitious; it was seen that "we must stoop to conquer." To this many were opposed. They said, "What! consult the eclectics and homœopaths? Never! They will demand special examinations; you will nurture and encourage those who would rend the Temple." And it did appear difficult; but the veterans of the profession, or some of them, said, "We will try." They said, "Gentlemen, you are equal with us; alone we will conflict—united we will form a powerful trinity. It is your and our benefit we should agree. We don't care for these schoolmen; a fig for their degrees. In our hands is the future destiny of the profession in this state. You have no schools here; we offer you the regulation of all schools. We know you have different ideas from us in the etiology and treatment of diseases, but you surely are anxious that the great fundamental branches of all medicine should be well known by those who intend to practice; that Anatomy [the basis of all], Physiology, Chemistry, Botany, Jurisprudence, and portions of Surgery and Midwifery, are equally as necessary for yours as for ours. You will have a proportionate share of the representation, and for all time to come a voice in the regulations of the curricula—preliminary and professional. We will make a clean slate—one portal of admission." They agreed, and by that compact Ontario led the world. Satisfaction results. The general profession has

in its hands full control. Examinations are becoming more thorough and practical The schools received it in a proper spirit; they know it to be a fair arena for the "survival of the fittest." Their examiners have been most exacting; the great number of subjects, from the nature of the union rendered necessary, are being condensed. They have also taken advantage of an examination, termed the Intermediate, which grammar schools prepare, and to this they add Latin, and have thus an uniform preliminary, if it is inferior. Now, why not make such a law universal for the Dominion? You have the power. You have no such difficulties as Ontario. You have also its example to nerve you on. If you only put your shoulder to the wheel you can place Quebec in the van. After all, we are not English nor French, but Canadians. I think this association should every year consider closely medical education. In vain look for a harvest if we do not sow good seed. We graduated last year over 160 students. Many of them do not remain; they go to other lands where their talents may receive fuller recognition. The time has come to revise the professional course. The old seven subjects have not advanced equally together—at least are far from equal importance. Place Chemistry and Botany in the preliminary course, and put Pathology and Histology where Chemistry is now. A short time on Medical Chemistry would just fill the time now allotted to Histology. The preliminary course also requires revision. As an examiner, I have often noticed errors in style and spelling. For such an abstruse science as medicine, demanding so high an order of intellect, too much trained study and intellect we cannot have. Raise the attainments and not the fees; guard against evasion and cramming. Let there be a thorough classical course; nothing so disciplines, refines and cultivates. We belong to private life, and should shine there by the graces of polite learning and good scholarship; thus can you, if ever, have a profession to be proud of. To those who pooh-pooh this preliminary education, who affect to sneer at a stringent examination, I will read *in terrorem* an extract from the proceedings of the last meeting of the Medical Association of the great State of New York. I may say they are struggling for amendment in this respect.

They bewail their position, they are fighting hard for higher standards, and sigh for the state of affairs we have in Ontario, which they appear to look on as the desired condition. (The necessity of maintaining a high standard of medical education was then insisted upon.)

I believe, gentlemen, Canada has also settled the question of female medical education, at least has so treated it as to consider it settled. What bacillus disturbed the hitherto placid flow of the corpuscles in the Canadian female vessels I leave to Professor Osler to discover. Its action aroused in our dear sisters that spirit of curiosity to penetrate the arcana of medical science and demand admittance to the temple. For a short time all went well, nothing could exceed the gallantry of their male fellow-students. It was charming to observe the spirit of kindly welcome they were received with. Alas! It was of short duration. A storm arose [and through no fault of the women]; all was changed. The male members demanded their exclusion, and they were forced to retire. Public feeling was aroused, generous men came to the rescue, pronounced co-education a failure and two female colleges fully equipped were founded. Three women graduated from the Kingston School greatly distinguished themselves in the race for license, asked no favors, and are now practising. Why they did not invade the sister professions of law and theology I do not know. If they can take all the tests required, I see no reason to object; I believe they will be the means of raising, not lowering the standard.

Allow me to call your attention to the important subject of the collective investigation of diseases. The American Medical Association, at its last meeting, warmly endorsed it, and voted $300 to carry it out. It has been attended with the best results in the hands of our great prototype, the British Medical Association. Our country, extending over so large a territory, with such varied racial, climatic and other conditions, ought to be peculiarly favorable for it. An easy subject could be selected, first, one simple, and of general interest, that any general practitioner could manage. Apart from its scientific value, it would be a means of uniting more closely our scattered forces, and be

another link binding us more firmly together. I presume it will be considered by a special committee. It was, in my opinion, a very unfortunate train of circumstances that led to the stoppage of the publication of "The Transactions." True, our medical journals, with a courage and enterprise highly creditable, give a very good account of our meetings, but that does not meet the wants. The most important part, viz., the discussions, are wholly ignored. These volumes, therefore, if only as a record of the national medical progress, would be of immense value. By all means revive them. Each man could revise, and, if required, pay for the publication of his contribution, if it passed the censors. Experience will dictate some plan whereby the publication can be resumed and its suspension guarded against in future.

As this meeting is held in the commercial centre of the country, it seems peculiarly appropriate to bring forward the subject of the medical service on ocean steamers. If it be correct (as I have heard) that the British Acts order that these officers be shipped only at its ports in Europe, we ought to have it amended; we ought to have more of these appointments. Great room for reform is said to exist, and a bill now before the American Congress demands an extra physician on all ships carrying over six hundred, including the crew. Nurses and two small hospitals properly equipped are also to be provided; for the mortality given, in some cases as high as 70.6 per 1,000, appears to give grounds for these demands. Its particular interest to Montreal is my excuse for troubling you with it.

The increased and increasing number of specialists affords, I I think, just ground for congratulation. It is a feature more than any other indicative of growth and progress. If carefully examined, it is not the paradise the general practitioner sighs for. The eye and ear, the throat and skin, and the uterus appear to be the favorite organs. Any good general practitioner, it is asserted, can treat two-thirds of special cases. The young man who selects such a field with us runs great risk. It were a grand thing were it a haven for old practitioners; but that cannot be, as it requires a man to concentrate all his abilities early on it. He has also to spend a good deal of time and study

after acquiring his general knowledge, but the good effects of it are seen in stimulating the general practitioner to more study, to cultivate the use of instruments of precision beneficial in diagnosticating disease. As a man can only be a specialist on one subject, there can be no danger of his interfering with general practice. They help it greatly, and deserve every encouragement.

So far Canada has not done much in medical literature of a substantial or permanent quality. A growth of this kind can hardly be forced, and there is certainly no dearth of medical books, general or special. It would be worthy of examination whether or not it would pay to publish a series of text-books. The schools could write, and entrust one book to each school. In this way it could be made profitable. I only hint at the matter, believing such a series could be written as would surpass that of any other country.

So much noise made and ink shed by our American friends on " the code " led me to look for " ours," but such an instrument does not exist. Although not pretending to any higher morality than our neighbors, we shall not require one, and I fondly hope that the amenities that should exist between gentlemen will always be effectual to protect each in his rights. Rarely, indeed, have we to complain of want of sympathy and warm feeling in favor of those who are so unfortunate as to be called on to treat lesions of great difficulty in mean exacting patients, and I venture to submit that a member so circumstanced should have redress before a court of this Society. Not to the Hindoo alone is loss of caste a penalty ; the lopping off of a member for such dishonorable practices, as I have felt and seen, is a power which this Society might occasionally exercise with benefit to itself. The man who is afraid to speak out boldly, but by mean insinuations and to gain notoriety urges a patient to seek redress in a court of justice, for example, in cases particularly of fracture and dislocation, and where there was neither want of skill nor care, should be broken and dislocated from this Society and his conduct exhibited in its true colors. It would seem, too, that our courts should sometimes call unbiassed expert testimony. A case occurred in my neighborhood where the unfortunate sur-

geon in attendance, a well-educated, experienced man, paid three hundred dollars and costs to stop a prosecution against him, where one-half of the witnesses, old practitioners, too, were willing to swear a case of second stage of hip-joint disease was a thyroid dislocation. This was all based on reading books, and the evidence would have been given almost solely on them in behalf of the prosecution. The facility with which men will testify according to the side they are subpœnaed on calls for some change, and great benefit, in my opinion, would result if the court would call independent expert testimony. I admit it is a question requiring careful discussion.

The probability of the International Medical Congress holding its next meeting in the United States should be noted. I would give our secretary power to select a few who will be prepared to maintain the honor of Canada in this great assembly.

The threatened invasion of cholera has given a wonderful impetus to hygiene and sanitary laws; it has stimulated largely municipal scrubbing. This is one of its redeeming features. Dr. Oldright, of the Ontario Board of Health, who has devoted more time and attention to it than any man I know, has kindly given me a large amount of information on the subject, which, I regret, time will not allow me to make use of. Since our last meeting Ontario has taken up the subject warmly. It has a well managed Bureau of Sanitation, and will, before our next meeting, have a well qualified board of health and a health officer in each municipality.

(A fitting tribute was then paid to the memory of the numerous great men in the American profession who have died during the year.)

Could the author of *De Sedibus Morborum* now appear on the scene, how vast a progress, how great a change from his day, would he behold! True, there were more theories then than now, but they must now be based on rigid experiment and oft repeated observations. Hypothesis will not do; they must stand the test of critical scrutiny. The study of minute organism has led to wonderful results, surpassing in interest all other investigations, and exercising a wonderful influence on the causes and treatment of diseases, producing results which appear destined

to effect a revolution in medicine. Bacterial pathology, as it is called, holds universal sway. We hear of nothing but microbes, bacilli and germs. Germs to right of us, germs to left of us, germs everywhere. We are stormed at by germs. The partisans of Cohnheim and Stricker, of proliferation and emigration, fold their arms and look on. Leucocytes have for the time lost their interest. The names of Pasteur and Koch alone absorb attention; they are known everywhere, and we admire and wonder as disease after disease appears to yield to the investigator and the veil is removed. Already pneumonia, pleurisy, syphilis, some skin diseases, typhus, typhoid and yellow fevers are shown to depend on micro-organisms. The list lengthens. Last year the whole world was amazed at the discovery that tuberculosis, which, in one of its many forms, pulmonary consumption, carries off annually 6,597 of the people of this Dominion, belongs to the bacillary group—is of parasitic origin. The results of this year's investigation serve to confirm the idea, although for a time they are left out of sight by the startling announcement that the dread scourge cholera which threatens us with a visit has also its peculiar microbe. More important still are the results of the brilliant experiments of Pasteur in producing by attenuated culture a virus endowed with protective properties as well marked as those of Jenner in the case of vaccination for small-pox. That such is already attainable is shown by the experiments of Professor Freire, of Brazil, who this month reports that following Pasteur's method of culture he withdraws blood or some organic fluid and introduces it previously sterilized into Pasteur's flasks, and containing solution of gelatine or beef. With this up to date he vaccinated 450 persons, almost all foreigners; freedom of disease has been pronounced, they having passed through quite a severe epidemic with only six deaths. Among the 450 less than 2 per cent., while it was 30 to 40 per cent. mortality among those not vaccinated. According to calculations of Bousquet, charbon inoculation gives an immunity to one-tenth and vaccination of small-pox an immunity of one-fifth. Such preventive measures in the case of yellow fever are worthy of consideration to us, as demonstrating possibilities in the treatment of cholera or analo-

gous diseases. Not all our sanguine expectations will be verified ; it would be too long a leap, and we know "*Natura non facit saltum.*" Only by slow degrees do we advance ; that we are a long distance from perfection is shown by the fact that a French writer says of its attainment :—"The day when science shall have attained a complete knowledge of normal man to the very depths and inmost parts of his organization, and into the most secret mysteries of his life—the day when science shall have unveiled all the secrets of the pathological condition and understood every modification that external agents can produce in the economy—that day science will be completed." We are far from that time yet. Such quickening and revival, however, has never been known before. Empiricism is despised, and the world demands more philosophic methods. Nations, too, seem more willing to give medicine its proper estimate. The scientific investigator can now hope for fame and reward. Germany pays three millions of dollars to its medical schools annually. France also gives large sums, and other countries follow ; nor are they chary of giving them the honored titles of the state. Koch, Virchow, Langenbeck, Frerichs and many others have had their merits recognized. England, it appears, cannot get any further than knighthood ; while Canada gives nothing. This should not be. It is the duty of our state to give some reward to those who maintain its honor in the scientific world, and who do so much "*pro bono publico.*" It should not require a man to wade through the septic paths of political life to reach the honored places in the gift of the state. What say you, gentlemen, to such a condition ? Therapeutics, which has been awarded the importance of a separate section by the British Medical Assooiation at its last meeting, and which are so important in relieving and preventing suffering, make more and more advance. Micro-organisms entering so largely as factors in etiology, antiseptics would be naturally looked to, and the report of last year's medical association (American) declares that antiseptic inhalations in pulmonary diseases have proved of value, whether the germ theory be sustained or not. In this department also the systematic collection of therapeutic results by collective investigating committees will be invaluable in

showing the worth of remedies alone, united, or compared with others. A comparison of a prescription now with twenty or thirty years ago shows a wonderful difference. Chemistry for the past few years has produced many powerful remedies. The bromides, chloral, croton-chloral, pepsine, pancreatine, salicylic acid, and lately kairin, aldehyde, jequirity, salts of nickel, nitro-glycerine, chlorides of gold and sodium, are only a few of the drugs and remedial agents introduced, not to speak of the great changes in general treatment, are sufficient to show that pathology and physiology have not avanced alone. Fortunately, too, we have a conservative nation to revise our pharmacopœia and calm the apprehensions of the most timid. Surgery, as might be expected from the ardor, enthusiasm and boldness of its followers, the utility and brilliancy of its results, keeps more than pace with its sister art, Medicine. Many and striking are its advances. Antisepsis still holds such sway as to be considered universal; for he who may be skeptical, still must comply with the general demand in order to avoid censure. Its great champion has been knighted, which seems small honor to him for the work done by him and the world-wide benefits he has effected. A beginning of appointments to the Lords could well have been made with him, as his presence would effectually guard against the decomposition in that venerable assembly. Never before was medicine held in such high estimation. Every year adds to its progress. Let any man twenty years in practice, and who has read and kept himself informed, contrast its condition now and then. How immense the difference, how changed the diagnosis. And amid all this brilliant prosperity and march of scientific medicine, what position do we occupy? I would rather hear the answer from others. We have no great past, no great names, no roll of honor—all our hopes are in the future. We look at the origin of the Royal Society, of the British Medical Association, now numbering its thousands, and we have hope. We have it in our power to ensure an educated, well-trained profession. Do it, and we can expect great results. Our schools must not be to make money; they should be kept to the highest standard. We are able to hold out inducements

to many ardent young men to qualify themselves by accumulating the stores of medical science. The profession will surely honor them, applaud their zeal and industry. We are satisfied with our country, proud of its growth and great future; we feel that freer, fairer or nobler heritage has not been given to the sons of men. No country possesses a better trained body of physicians. It needs no mystical lore to prognosticate solid results; the foundations are laid broad and deep, calculated to support a structure solid, graceful and imposing. No country can boast of better institutions. With a true paternal care, our government provides for every form of suffering. The insane, the blind, the deaf and dumb are in no country better treated, regularly and strictly inspected. Our hospitals, mainly supported by the State, yet allowing freely for private munificence, are models of neatness, economy and efficiency; our journals keep pace with the progress of science and exhibit an enterprise and originality worthy of a far richer country. Our schools have only to unite, decide on a few changes, work each in fair competition, and great results will follow, so that we have reason for congratulation. We can by a little effort make this Society more thoroughly representative Canadian. We must have it so that every Canadian from Cape Race to Vancouver will look to it with proud satisfaction. You know in this country the more sparsely settled a district is the stronger is the fellowship and affection, the more closely are families knit together. We should know each other better; many stores lie uncollected and much fine talent there is lying rusty. We must see to it that our Society is more vigorous, more sheltering. We favor the growth of county and provincial medical societies. They should be the vertebræ of this. I see men around me who watched over the cradle of the Society; they are, I rejoice to say, its strongest friends to-day. All honor to them. It is gratifying to see their efforts are appreciated by their example worthy of imitation, and when we come to celebrate our semi-centennial their eulogies will be delivered in eloquent terms, but the most eloquent of all will be the position of this Society—large, numerous and powerful, rich in the contributions of its members to science, and

making the name of Canada familiar as a household word in the great commonwealth of medicine.

Gentlemen, this year an honor of no ordinary nature is conferred on us, an advantage of great practical benefit, an event which, more than any other, indicates the progress and civilization of our country. It is the meeting of that great body, the British Association. After much labor and generous devotion our scientific men have induced that great body to visit us and hold their annual meeting in this city. Nothing illustrates the universality and freedom of science more than this event. In the noble language of the great Irish physician, "Reason has extended its empire from the old world to the new world—from Europe to the Antipodes. To-day she has the whole world for her domain, and the sun never sets on her possessions. Individuals take rest, but the general intelligence of mankind is forever sleepless." It would be strange, indeed, were there no votaries of Hygeia among that learned body. I am happy to be able to announce they will do us the honor of being present at our meeting, and, what we value much more, will take an active part in its proceedings. No words of mine, gentlemen, can express the sincere cordiality of the welcome we offer them to-day. We hope their visit will be full of pleasant recollections, that they will have truly a feast of reason and a flow of soul. Not only their countrymen welcome them, but the descendants of the brave adventurous companions of Champlain, LaSalle and Frontenac, the profession of the people whose happy and contented homes they saw lining either side of the majestic river, before and after they passed the frowning battlements of the Gibraltar of this western continent, a people whose happiness, contentment and patriotism are expressed in the trite assertion of many of her sons, that the last shot fired in defence of British rule will be fired by a French-Canadian. They can on all sides see evidence of the success and greatness of a country which, although seven hundred miles from the sea, they are yet only in the gateway of. Gentlemen of the British Medical Association, we are satisfied to offer you the medical profession of Montreal as an epitome of the whole body. You will find that courteous

hospitality, generous and warm welcome in abundance, so that when you return home, it will be, I am sure, with the idea that if we are no successful cultivators of science, we are capable of admiring it and honoring it in others. Gentlemen, on the 2nd of August, 1883, at the Philharmonic Hall in Liverpool, at a banquet of the British Medical Association, in reply to the toast of "Our Visitors," one George E. Fenwick, while in the full swing of post-prandial hilarity, did then and there thank the British Medical Association, and said if it would visit us they would receive a cordial welcome. Allow me to say not anyone was better calculated to tender that hospitality, as not anyone will more faithfully carry it out. I am sure his order, if needs be, will pass current through the length and breadth of the land, for few places you will visit in Canada where you will not also find pupils who have sat at his feet to receive from an enthusiast the latest discoveries of science or watched in the theatre the dexterous hand and clear head which guided it through the boldest operations of modern surgery. Receive, gentlemen, my endorsation, and be assured you have a friend and willing host in every Canadian physician.

Gentlemen, I thank you for your patient attention, which I feel I have overtasked. Rely on my constant efforts to promote the usefulness and extend the influence of your Society. Its interests shall be always dear to me, and my constant aim not to be inferior to those who have preceded me in this high office.

CANADA

Medical and Surgical Journal.

MONTREAL, SEPT., 1884.

CANADA MEDICAL ASSOCIATION.

The seventeenth annual meeting of the Canada Medical Association was opened on the 25th August, in the Synod Hall, Montreal. There was a very large attendance, members from all the Provinces being present.

Morning Session.

The retiring President, Dr. Mullin, introduced the President elect, Dr. Sullivan of Kingston, who took the chair at 10.30.

Dr. Hingston, chairman of the Local Committee of Arrangements, welcomed the members on behalf of the profession of the city of Montreal.

The President invited Mr. Lawson Tait of Birmingham, Drs. McGraw and Brodie of Detroit, Dr. Murphy of Kansas, and Dr. McMillen of Hull, Eng., together with the past Presidents, to take seats on the platform.

The minutes of the last meeting were read and approved. A large number of new members were proposed and elected.

Dr. Fulton read a report on Necrology, reciting the names of those members of the profession of this country who had died during the year.

The Secretary read the report on public health by Dr. Canniff, which, on motion of Dr. Worthington, was referred to the committee for further consideration.

A nominating committee was then struck, and the following officers of sections were nominated by the chair, viz.: *Medical Section*—Chairman, Dr. Thorburn, Toronto; Secretary, Dr. Burt, Paris, *Surgical Section*—Chairman, Dr. Roddick, Montreal; Secretary, Dr. Tye, Chatham.

Afternoon Session.

The meeting was called to order at 2.30 p.m. The President

then read his address (*see page* 87), after which the meeting resolved itself into sections.

Medical Section—Afternoon Session.

After a few opening remarks by the chairman, Dr. Campbell (Seaforth) read a paper on *Puerperal Septicæmia.*

Dr. Sheard asked if Dr. Campbell had had any opportunity of making pathological investigations. He referred to cases of autopsy where no rent of the uterine tract could be discovered to produce the trouble.

Dr. Adam Wright asked if Dr. Campbell had discovered any other causes for the disease in his cases, aside from laceration. He thought no evidence was adduced to show that the lacerations were the cause of the absorption.

Dr. Smith spoke of the identity of this disease with surgical fever. He recommended disinfection of the hands and other antiseptic precautions.

Dr. Brodie (Detroit) stated that it was probable that the cause was in existence before the birth of the child. He thought in many cases he could predict before confinement that puerperal fever would follow. There was in some cases an erysipelatous element before birth.

Dr. Patterson thought puerperal fever and septicæmia synonymous. It arises occasionally from atmospheric causes, without any other known source.

The Chairman remarked upon the close alliance of erysipelas and puerperal fever.

Dr. Campbell, in reply, thought the poison in his case originated entirely within—autogenetic.

Dr. Mullin could not see that the poison in these cases could enter readily by lacerations, but must enter by some other door or else we should meet with it more frequently than we do. In the majority of cases he thought it due to decomposition of clots or shreds within the uterus. He did not think erysipelas was the potent cause it is sometimes represented to be. He did not think he had ever been the means of conveying septic matter from erysipelas cases. He could not understand how Dr. Brodie could predict puerperal fever, unless it was in a debilitated system, when the contractions of the uterus were not likely to be strong, and clots would form.

Dr. McKay thought the poison might be generated in a debilitated system through imperfect resolution.

Dr. Sloane asked Dr. Mullin if he had not seen cases where the contractions were perfect, and yet puerperal fever follow.

Dr. Mullin replied that notwithstanding that the contractions might seem perfect, yet it was only apparently so, and thus clots were concealed.

Dr. Dupuis read a paper on *Nostrums and Medical Advertising.*

Dr. Bray agreed with the writer except the remark that medical councils should be elected who would put a stop to medical advertising. He referred to the efforts that the Medical Council in Ontario had already put forth, and he hoped that the Councils in both Ontario and Quebec would be strongly supported by the general profession.

Dr. Day stated that they were about going before the Legislature to obtain power to strike from the register any member of the profession who should demean himself by advertising nostrums. The chief vendors of nostrums were those whose names appear on the register.

The Chairman thanked Dr. Dupuis for his paper, and thought he did not give sufficient credit to the Council for what they had already done in the matter.

Evening Session.

Dr. R. MacDonnell exhibited two cases of *Lateral Sclerosis.*

Dr. Osler remarked upon the probability of local focus being present in nearly all cases. He described cases of difficulty of diagnosis from caries of vertebræ. The cases shown were interesting, especially the first, from its obscurity.

Dr. Harrison of Selkirk read a paper on *Cerebro-Spinal Meningitis.* He described several cases which had occurred in his own neighborhood, and which presented an acute character, with fever and well-marked nervous symptoms. He had alluded to this peculiar form of fever in a paper before this Association two years ago. He now considered that they properly belonged to the category of cerebro-spinal fever. The disease had occurred both in children and in adults.

Dr. R. P. Howard remarked upon the rarity of this disease in this country. We had had one mild epidemic of it in this city some years ago. It also occurred in epidemic form in the Eastern Townships. In some few localities, as Sarnia, for instance, it is often seen. It is interesting to enquire, what is its true pathology, and what the explanation of these outbreaks.

Dr. Bray had seen one epidemic of this fever in his district.

He found that it attacked chiefly the poor, and more particularly colored people. It was very fatal.

Dr. Geo. Ross remarked that he had had the pleasure of hearing Dr. Harrison read his paper on the same subject at Toronto. He (Dr. Ross) had then taken exception to arguments concerning the nature of the disease described, except it was in some cases substantiated by *post-mortem* examinations. As it had been found impossible to do this, he considered, even yet, that the fallacies he had previously suggested might really have existed in certain of the cases. Tubercular disease of the nervous centres will often perfectly resemble the genuine cerebro-spinal fever.

In answer to a question, Dr. Harrison said he treated his cases with potass bromid. and iodid. He first saw cases in 1868 or 1869; they were very acute, lasting from 48 hours to five or six days. The cases he had been describing occurred within a radius of six miles; the shortest lasted four weeks, the longest from 10 to 12 weeks. There was not always hyperæsthesia.

Dr. F. W. Campbell said that during the epidemic 10 years ago his cases were all amongst the well-to-do. The symptoms were very striking, and opisthotonos was generally present, then remittent and intermittent types of fever. He thought large doses of quinine did harm.

Dr. Osler said that, in his experience, the diagnosis of cerebro-spinal meningitis must be received with great caution. An autopsy could alone put such a case beyond doubt. He had, at different times, had four cases submitted to him for *post mortem* examination which were held to have been cerebro-spinal fever. Of these two proved to be typhoid fever, the third variola, and one only showed a true inflammation of the meninges.

Dr. R. P. Howard would suggest the question, Why should this disease occur in such isolated places? This was extremely unlike the behaviour of cerebro-spinal fever in Europe; there it is a real plague, as, *e.g.*, in Russia, Ireland, etc. And another question, Why, this being the case, had it died out here, after such short prevalence? As regards the duration of the cases described, he knew of only one fever which would last so long, viz., remittent fever, which might continue as long as three months.

Dr. Mullin stated that a number of cases observed in Hamilton all occurred within four months. Isolated cases said to have been seen since that time, he thinks, were probably typhoid.

The CHAIRMAN thanked the reader and spoke of the difficulty of obtaining *post-mortem* examinations in the country parts, the prejudices of the people standing in the way of the advancement of medical science.

DR. STEPHEN LETT, of Guelph, then read a paper on *The Opium Habit and its Treatment.* He described the ill results of this pernicious habit and the line of treatment which he found most beneficial.

DR. PICKUP enquired concerning the value of coca leaves in the treatment of these cases. Dr. Lett replied that no substitute or antidote could be considered reliable.

DR. HENRY HOWARD said that he never saw an opium-eater who had not been previously reduced by abuse of alcohol. He trusted to gradual diminution of the dose of opium simultaneously with supporting treatment.

DR. R. P. HOWARD next read a paper on *Some Varieties of Dyspnœa met with in Bright's Disease*, alluding specially to the well-known Cheyne-Stokes' respiration.

DR. GEO. ROSS spoke of the great importance of recognizing the altered respiratory movements described by Dr. Howard as dependent sometimes upon Bright's Disease, even in an early stage. Dr. Ross described two cases bearing upon the case. The first case, an elderly gentleman, was first seen suffering from a severe attack of spasmodic asthma. Examination of the urine proved him to be suffering from Bright's Disease. Subsequently he developed most typical Cheyne-Stokes' breathing, and this continued during three or four months. Dr. Ross was not aware that any of our authors spoke of the possibility of the persistence of this symptom for such a length of time. The second case, a lady, had long suffered from asthma, but its dependence on Bright's Disease was overlooked. A singular feature of this case was the sudden development, during these attacks, of pulmonary congestion, as shown by universal râles and bright blood in the sputa.

DR. OSLER spoke of a singular observation he had made. Happening to be in the nursery of a relative he noticed one of the children, a little girl one year old (not robust), to be breathing after the fashion of typical Cheyne-Stokes. He noted carefully the intervals, etc. He examined the urine, but found nothing. It passed off, and though he had seen the child repeatedly since had not observed any peculiarity about the breathing.

DR. HOWARD had never observed congestive symptoms present, as alluded to by Dr. Ross. He suggested that the child

mentioned by Dr. Osler should be watched still, as future developments might explain the anomalous occurrence. Dr. Howard spoke of the frequency with which an examination of the urine was absolutely necessary to make a real diagnosis. As regards treatment, he limited himself to treating the disease itself, as usual, with diaphoretics, vapor baths, etc. Sometimes nitro-glycerine was useful.

Dr. William Gardner, of Montreal, then read a paper on *Common Errors in Gynæcological Practice*. The object of the paper was to point out the mistakes most commonly made in the diagnosis and treatment of the diseases peculiar to women. The slighter forms of pelvic peritonitis and cellulitis, with their influence on pathology and treatment, were often not recognized. On the subject of pessaries much misconception obtained. Certain practitioners appeared to possess unbounded faith [such as an extended experience does not justify] in these appliances, while others, of equally small experience, decry them as of little or no value. The author believed, with Mundé of New York and Löhlein of Berlin, that, while pessaries and other therapeutic agents are often of the greatest value in the treatment of displacements, when *chronic*, such affections are rarely completely cured. The necessity for suitable constitutional treatment, concurrently with appropriate local treatment, is often imperfectly recognized. A few other points were touched upon.

Dr. Trenholme remarked that he did not fully share the author's views on the great frequency of chronic pelvic inflammations or in their influence on uterine affections. He affirmed his belief in the value of pessaries in curing displacements.

Dr. Heywood Smith, of London, Eng., endorsed most of the author's view here advanced, but believed that perimetric hæmatocele is the starting point of many cases of pelvic inflammation.

In reply to a question from Dr. C. O. Brown, of Acton Vale, Que., Dr. Gardner said that he believed in the great efficacy of hot water vaginal douches, and that he constantly used them in the treatment of chronic pelvic inflammations.

Dr. Henry Howard read a paper entitled *Materia Cogitans*, setting forth some of his views on the relation between thought and brain-matter, after which the section adjourned.

Surgical Section.

This section met at 3.50 p.m. Dr. Roddick, in taking the chair, thanked the Association for the honor done him in appointing him chairman. He suggested that, in future, the

chairmen of sections should be elected at the previous meeting, so that addresses on their respective subjects might be expected from them. He congratulated the members on the number and excellent character of the papers to be read.

The first paper was presented by Dr. Blackader, entitled a *Case of Congenital Lipoma of the Foot.* The enlargement was noticed at birth, but had increased in size beyond normal growth in spite of continual elastic pressure made by means of Martin's bandage. At the age of 14 months the hypertrophied toes and tumor were removed by Dr. Roddick. Thorough antiseptic precautions were taken and the wound healed in great part by first intention. The measurements of the foot after the operation were almost the same as the normal one. Reference was made to the history of similar cases recorded, and their etiology and pathology discussed. Preference was given to the views of Dr. Busey, of Washington, who referred the changes to congenital defect or diseases in the lymphatic system.

In the discussion which followed, Dr. Osler related the particulars of a case which he had a few years ago, in which there was congenital and progressive enlargement of the right upper extremity, the bones, muscles, etc., all being enlarged. In this case the palm of the hand was especially enlarged, owing to an increase in the amount of fat. The grip of the affected hand was more powerful than that of the other.

Dr. McGraw, of Detroit, mentioned a case which he had seen in Langenbeck's clinic in 1861, where there was enlargement of the left lower extremity and left side of pelvis. This was a case of simple hypertrophy, uncomplicated with any tumor, involving all the tissues of the limb, and proceeding to such enlargement that the girl was unable to walk.

Drs. Kerr and Fulton continued the discussion, which Dr. Blackader concluded.

Dr. Fulton, of Toronto, then read his paper on the *Thoracoplastic Operation of Estlander.* This paper was confined to the chronic forms of empyema. Resection of a portion of rib for the evacuation of matter has long been practised, but Estländer tried to obliterate the suppurating cavity and produce occlusion of the pleural fistula. Chronic cases are usually treated by incision, drainage and disinfection of the cavity. Dr. Coleman reports 50 cases treated as above, with 50 per cent. of recoveries, 33 per cent. died, and in 17 per cent. the fistula remained. A fistula usually results from the formation or existence of a cavity between the thorax and lung lined with pyogenic membrane. The size of the cavity varies indefinitely,

as does the amount of discharge; but a slight discharge may prove dangerous, as amyloid or tuberculous disease may follow. Dr. Fulton then read the details of the following case:—M. B., æt. 28, admitted to hospital 26th November, 1883; family and personal history good. During May and June of the preceding year, her chest was aspirated and serum removed. In June of that year pus was found, and till July, 1883, the discharge continued, and the cavity was washed out regularly with salicylic acid solution. The discharge continued, and upon admission patient was noticed to be spare and anæmic, with slight hectic. In the axillary line between the 7th and 8th ribs of the right side, the opening was seen. The upper portion of the right lung and the whole of the left lung were normal; temperature normal; amount of discharge one ounce daily. The cavity was regularly washed out, but no improvement being noticed, the following operation was performed: An incision five inches long and parallel to the 6th and 7th ribs was made, the periosteum divided and raised on each side and three inches of the 7th rib removed. The upper margin of the wound was then raised and a portion of the 6th rib was also removed. The slight hemorrhage that followed was arrested by torsion, the cavity washed with carbolic lotion and a large drainage-tube introduced. The temperature rose but slightly after the operation, and recovery was uninterrupted, the cavity being washed out daily with solution of carbolic acid and tincture of iodine. The patient left hospital in March, 1884. She has now improved in general health, the cavity is gradually closing up, and Dr. Fulton thinks that in less than a month the tube may be discarded. The ends of the resected ribs can be felt, but the space between feels firm, and osseous deposit is likely taking place. Dr. Fulton thinks the operation should be performed in all chronic cases of empyema which have resisted ordinary treatment for some time; in those cases, for instance, where a fistula has remained for five or six months and there is no sign of tuberculosis or albuminuria. The incision must depend upon the situation of the cavity and position of fistula, but the lateral situation is best. The surgeon may remove portions of two, three, four or even more ribs; of course the 1st, 2nd, 11th and 12th ribs must not be touched. There is usually but little hemorrhage. An elastic bandage may be placed about the chest to aid in occluding the cavity.

Dr. Hingston thought the subject of operating in empyema a difficult one, for we seldom find two cases exactly alike. Thought that Estländer's operation would be more successful if portions of more ribs, but to a less extent, were excised, for in

many cases the excision of one or two ribs can have no effect in aiding in the occlusion of the cavity. Recommended the thorough washing out of the chest with carbolic lotion and the free exposure of the whole surface as the best methods of treatment.

Dr. Kerr gave a short account of a case which he had seen in consultation. In this case a free incision had been made and patient was then sent to the sea-side and the general health attended to, and on her return the extent of the secreting surface appeared to have lessened, for the discharge had diminished. Thought the curette might be used for the eradication of the pyogenic membrane.

Dr. Holmes thought that if cases of empyema were earlier treated, less disastrous results might ensue. Thought that the slow closure is often due to the fact that pus has remained in the cavity for a long time, and by its presence has in some way interfered with the vitality or tone of the pyogenic membrane.

Dr. Roddick gave a short account of the various methods of treating empyema, as followed out in the Montreal General Hospital for the past 14 years. In chronic cases the rule now is to excise an inch or more of one rib and drain by means of a metal tube of large calibre, antiseptic precautions being taken throughout.

Dr. Shirriff, of Huntingdon, then read a paper on a bad case of hemorrhoids, in which he had pursued with success the treatment of crushing, as advised by Pollock in Braithwaite for January, 1881, and as carried out by him in his wards at St. George's Hospital, London.

In the discussion that followed, Drs. Sloane, Hingston, Tye and Roddick took part. The meeting then adjourned at 6 p.m.

The Surgical Section met again at 8.40 p.m., and the first paper read was by Dr. Fenwick, of Montreal, upon *Abscess of Abdominal Parietes extending from Meckel's Diverticulum* (to appear in a subsequent number of this journal).

Dr. R. P. Howard said that he recently was consulted for an acute inflammation about the umbilical region; matter was discharging, and the navel was in a granulating condition. The induration appeared to be deeply situated in the abdominal parietes, but the walls were very thick and its exact position could not be defined. Advised patient to rest and apply poultices. In a few days a semi-solid concretion about the size of a bean escaped, and the patient said that five such had been passed. Since then the patient has recovered. Dr. Howard

thinks there was connection with the bowel, probably through the umbilical vesicle which had remained patulous.

Dr. King, of Hull, Eng., mentioned a species of abscess which began by a hard, deep swelling, situated so deeply that it was difficult to make out whether it was intra or extra-abdominal. Thought such begin in the muscles, sink towards the inguinal region and there appear as carbuncular swellings, which, on being opened, heal quickly.

Mr. Lawson Tait suggested that the calculus found by Dr. Fenwick should be cut, for he thought it was made up of cholesterin, and therefore hepatic in origin. He advised an immediate opening of the abdomen in all cases where the matter discharged from a sinus in the abdominal walls has a fecal odor. Discountenanced the traditional fear of interference with the peritoneum, and thought we were just as much justified in opening the abdomen to relieve suffering as we would be in opening a periosteal abscess in the thigh or in giving opium to relieve pain.

Dr. Fenwick, in closing the discussion, did not think the concretion was wholly made up of cholesterin, but considered it to be a mass of fæces surrounded by phosphate of lime.

The next paper read was by Dr. Shepherd, of Montreal, on *Ligature of Anterior Tibial Artery in a Case of Compound Fracture of the Leg.* (This paper will appear later.) The case itself was also presented, showing the excellent result obtained. Drs. Fenwick, Sullivan, Fulton, Giles, Girdwood, Holmes and Proudfoot took part in the discussion that followed the reading of this paper.

A paper by Dr. Gardiner of London, Ont., on *Burns and their Results* followed, and then Dr. Stewart of Montreal read a practical and interesting paper on the *Actions and Uses of Naphthalin.* This agent, which is one of the latest additions to the now already large group of antiseptic agents, is a product of the distillation of coal. As an antiseptic it compares very favorably with iodoform. For a certain class of cases it is undoubtedly superior. The kind of cases that it is especially suitable for are old septic ulcers and burns which have no tendency to heal on account of the septicity of the tissues. It is now a well-known fact that iodoform is apt to induce a certain sponginess of a granulating surface, and after a certain stage in the treatment of a wound has been reached, does more harm than good. Naphthalin is free from this important objection. It can be used throughout the treatment of a sore, and in place of retarding the healing after rendering the tissues antiseptic, it actually promotes

it. This, together with its cheapness, constitutes its great advantage over iodoform. It can be used either in a finely powdered form or in gauze.

Dr. Shepherd said he had used it often, and agreed with Dr. Stewart that iodoform was useless in granulating wounds; in such cases he discards iodoform and uses Balsam of Peru or naphthalin, but considered the balsam best as a stimulant.

Dr. Roddick had used it frequently in old burns and in chronic ulcers with satisfaction; uses it combined with boracic acid to facilitate the dusting of it. Where there is much discharge, as in empyema or large abscesses, he uses naphthalized jute as an outside dressing. The ordinary jute sprinkled with naphthalin answers the purpose very well.

The last paper read before the section adjourned was by Dr. Reeves of Toronto, entitled *Brief Remarks upon fifty cases of Trephining of the Mastoid.*

Tuesday, August 26th—General Meeting.

After the reading of the minutes, Dr. Mullin presented the report on Ethics. The adoption of the report was moved by Dr. Botsford, and seconded by Dr. Bray, with the suggestion that it be sent to the publication committee and prepared for circulation. Dr. Dupuis of Kingston took exception to remarks made in the report, and explained his position. Dr. Mullin spoke in justification of the report. Dr. Botsford asked leave to withdraw his motion, but was refused by the President. The motion was carried.

Dr. Hingston drew the attention of the members to a statement in an old French Encyclopædia, that a disease known as *mal de chicot* existed in parts of Canada, and asked if any members knew of it.

In reply to Dr. Saunders, the Secretary stated that no communication had been received from the Government touching the resolutions passed at the Kingston meeting regarding militia surgeons.

The President then called upon Mr. Lawson Tait to deliver his address on "Abdominal Surgery." (*See page* 65.)

Dr. Grant, of Ottawa, said he considered it a high honour for this Association to receive a visit from so distinguished a member of the British profession as Mr. Lawson Tait. He had listened to his admirable address with the deepest interest, and had very much pleasure in moving that a very hearty and cordial vote of thanks be presented by the members present.

Dr. BRODIE, of Detroit, said it gave him very great pleasure, as a member of the American Association, to join with his Canadian brethren in extending a cordial welcome to this distinguished surgeon. He heartily concurred in Dr. Grant's remarks, and would gladly second the motion.

Dr. MCMILLAN, of Hull, England, expressed the pleasure he felt in meeting the members of the Canada Medical Association. He doubted the advisability of removing the ovaries when no objective signs were present. He thought that Sir Spencer Wells' remarks on this subject were addressed more especially to young men, whose experience might be less than their enthusiasm, and not to men of large experience. Under the circumstances such words of caution were likely to have a salutary effect.

Dr. TRENHOLME, of Montreal, said he had performed the operation of removal of the ovaries twelve years ago, in a case where there was severe menorrhagia and metrorrhagia, with marked benefit to the patient. In recent years he had performed the operation frequently, and the results were, as a rule, satisfactory.

Dr. HINGSTON, of Montreal, contrasted Mr. Tait's eulogy of Canada with Dr. Knox's abuse of it, and agreed with the former. He congratulated Mr. Tait on his and Dr. Keith's disuse of Listerism in abdominal surgery, and thought the splendid results they had obtained were largely due to it. He thought with the speaker that the ligature should take the place of the clamp in securing the pedicle, and that the use of the perchloride of iron was a mistake. So far he was entirely with Mr. Tait, but there were some things on which he differed. He took exception to the criticism on Sir Spencer Wells, and thought that public opinion, which had pronounced unmistakably in Wells' favour, was not a bad criterion. He thought it highly dangerous to take Mr. Tait's rule for their guide as to the necessity of an operation, namely, that serious cases submit to operations and the hysterical do not. His (Dr. H.'s) experience was somewhat to the contrary; that the hysterical carried out their acting to the end, at least in America. He gave several instances of that in illustration—one especially, out of many, where he had been implored to remove the appendages in a young person—and when, on declining, the patient afterwards married, and all the symptoms had disappeared. He thought that when the objective signs were clear, no hesitation should be experienced in operating; but when the signs were altogether subjective, operations would be performed by

Mr. Tait's enthusiastic disciples that were unwarrantable. This question had a moral bearing which did not crop up in some other operations. An unnecessary operation of this nature was a crime against society, and it interfered with the interests of the state. He thought sterility unnecessarily induced in this way was an unmixed evil; and subjective signs alone were misleading and not to be trusted. He did not agree with Mr. Tait that the operating surgeon could under those circumstances place the responsibility on the shoulders of the general practitioner who had advised the operation in the first instance. Responsibility properly rests in this, as in all other surgical operations, on the one called in the last instance not only to do the mechanical work, but also to counsel and advise as to its necessity. He gathered from the fact that only a few (6) out of several hundred cases of epilepsy had been selected for operation, that Mr. Tait had not pronounced strongly in favour of the operation in these cases, and here he agreed with Mr. Tait.

Dr. Brush, of Utica, N.Y., said—He rose, with some diffidence, to make a remark or two upon the very excellent address of Mr. Tait. The subject of abdominal surgery, although falling outside of the special line in which his practice has been directed for some years—lunacy—was one in which he had always felt a deep interest. Under the tuition of Prof. Miner, of Buffalo, N.Y., his beloved preceptor, he saw some of his earlier operations which gave to the world the process of ovariotomy by enucleation, and it had been his pleasure to watch the impetus which that valuable and unique suggestion gave to abdominal surgery. He regretted that the eloquent speaker did not refer to the removal of the uterine appendages in certain cases of insanity, to hasten the menopause—but would, however, carry with him from this meeting a large amount of encouragement in the consideration of an operation which has for a long time been the subject of his thoughtful study. Prof. Wm. Goodell, of Philadelphia, has already reported a few cases, in the *American Journal of Insanity*, in which he had successfully performed Battey's operation for the relief of insanity in patients in whom there was markedly increased mental disturbance associated with the menstrual flow. With these cases in view, and bearing in mind Mr. Tait's six cases in which he operated for the relief of epilepsy, and the statement which he has made, that a mortality of not more than one in five hundred need be feared in making the operation for the removal of the uterine appendages for the relief of nervous symptoms, he would go home with increased faith in the propriety—nay, even the necessity—of the operation, in certain cases.

Dr. Heywood Smith said he quite agreed with what Mr. Lawson Tait had said as to the greater difficulty in the operation for removal of the uterine appendages as compared with ovariotomy. In coming to a conclusion as to the advisability of the operation, we ought always to bear in mind the difference between the rich and poor. A rich lady could afford to suffer—*i.e.*, she could afford to lie up and keep quiet and obtain medical relief, but a poor woman has to get her living, to exert herself, and could not, therefore, get that relief that was obtainable by her richer sister; in her case, therefore, the necessity for an operation was more demanded than in the case of the richer. As to the effect of the operation on fibroid tumours, his opinion was that it was of more use in cases of soft tumours than in those of a more dense structure. He had seen cases where, after the removal of both ovaries, profuse hæmorrhage continued so as to endanger the patient's life. But in the case of severe dysmenorrhœa, the result of chronic ovaritis and subsequent morbid changes in the ovary, we are convinced that the removal of the ovaries held out the best prospect of cure. With regard to what Mr. Tait had said as to the carbolic spray, he must say that, in his opinion, cases could be operated upon with less risk with it than without. He also occasionally used eucalyptus air. He was the first to use it in ovariotomy in London. It had the advantage over the carbolic spray in that there was no noise or wet fog. In reckoning the advantages to different operations of the spray or the reverse, we must be careful to estimate the growing experience of each operator, and not hastily set aside Listerism under the idea that it is useless or worse, when increased success may most probably be due to the increased experience in operating. As an instance of what antiseptic measures could do, he would mention that at the chief Lying-in-Hospital in London (N. British), of which he had been Senior Physician for more than twelve years, the mortality during the past three years, during which they had used carbolic spray in all wards, and otherwise carried out strict antiseptic measures, had been reduced to ·062 per cent. He would also state, in answer to the remarks of another speaker, that, as a matter of fact, the removal of the ovaries did not interfere with the sexual appetite, nor did it make women scraggy: on the contrary, many became plump after the operation.

Dr. Gardner, of Montreal, said he had been in the habit of removing submucous myomata which caused dysmenorrhœa, menorrhagia and metrorrhagia with Thomas' serrated spoon, and would like to ask Mr. Tait if he considered the removal of the appendages more safe or more effectual in such cases.

Dr. PROTHEROE SMITH, of London, Eng., referred to the fact that bleeding was very common in his younger days, and said he thought that the discontinuance of bleeding, by favouring congestion of internal organs, had made ovarian disease much more common in recent years.

Dr. FULTON, of Toronto, asked Mr. Tait if there were not cases in which tapping for the purposes of exploration was admissible? And if in some cases where there was extreme distension of the abdominal walls, it was not safer to withdraw only a portion of the fluid at first to reduce the distressing symptoms?

Mr. LAWSON TAIT, in reply, said that as Sir Spencer Wells had never been reticent in knocking other people over the knuckles, he must not expect to escape from similar treatment. Doubtless Sir Spencer would continue the discussion after his own fashion. Mr. Tait had only to say that any criticism he had ever made of Sir Spencer Wells was with most friendly intentions, dictated by an intimate acquaintance extending over many years. Dr. McMillan and Dr. Hingston had both somewhat misunderstood what he had said about operations performed in the absence of physical signs. Those cases were absolutely limited to three cases of epilepsy and about three others in which the operation was urged, and the whole responsibility of its performance was accepted by the medical attendant in charge of the case. Such an instance was published by Dr. Ertulby in the *Lancet* about three years ago. Dr. Ertulby pressed me to perform the operation, and undertook its whole responsibility. As we found double pyo-salpynx, the operation was entirely justified. The real protection alike of patient and surgeon is the introduction of the family physician, by whose concurrence the possibility of the performance of an unnecessary operation would be reduced to a minimum. It must, however, be remembered that surgeons who practise this department of the profession are as fallible as other human beings, and that with them mistakes must surely occur. They are to be judged, and their works also, by the same standards as are applied elsewhere, and not by others of an unjust or more exacting character.

In answer to Dr. Gardner, he (Mr. Tait) would say that his own experience was wholly in favour of removal of the uterine appendages as a far more safe operation than enucleation. Not only so, but as he had published cases where fresh tumours had grown after enucleation and removal of the appendages was ultimately required, he thought that the latter operation was in every way preferable. Like his friend, Dr. Protheroe Smith, he carried a lancet, but only as a surgical curiosity; he had

never used it. There could be no doubt that ovarian disease was on the increase, but he could offer no explanation of the cause thereof. It certainly did not lie in the discontinuance of the practice of bleeding.

In reply to Dr. Fulton, Mr. Tait had to say that tapping never could help in a diagnosis as an exploratory incision could, and it was quite as risky. A small two-inch incision revealed in most cases the precise nature of the tumour, and allowed all fluid to be completely evacuated, if nothing more could be done.

A vote of thanks to Mr. Tait for his admirable and interesting address was passed unanimously and enthusiastically.

The meeting then adjourned.

Medical Section—Afternoon Session.

Dr. Geo. Ross showed two specimens of *Aneurism of the Thoracic Aorta.* One had been obtained that day, the other two weeks previously. In the one case, the physical sign of tracheal tugging had been present; in the other, absent. In both cases, examination for this sign had been of great service both in diagnosticating the aneurism and in locating it. He believed that sufficient attention was not given to this physical sign, which was at times capable of giving information of the greatest value.

Dr. Worthington of Clinton read a paper on *Some cases of Diabetes Insipidus*, one of which was complicated with exophthalmic goitre.

Dr. Geo. Harley of London, at the request of the chairman, made some remarks. He said, in the first place, he objected to the term Diabetes Insipidus. He much preferred that the term Polyuria should be employed. Lay people had a great fear of the word diabetes, and they could not draw a distinction between its two varieties: the moral effect on patients, therefore, was of a very depressing character. What is the cause of polyuria? It may sometimes be connected with congestion of the kidneys, but it often exists in states of chronic atrophy. How rapidly is the urine secreted? In making experiments with dogs, he empties the bladder with a catheter, then in five minutes catheterizes again. He also exposes the ureter and watches the drops as they flow. Sometimes 1 minim per second. In man this amounts sometimes to ʒii per minute. This must have been the case in one of Dr. Worthington's cases, where 25 pints were passed in 24 hours. What is the exciting cause? Very often this cannot be traced. You can easily make saliva flow. How freely urine flows under the influence of diuretic remedies. The

kidneys are not altered, but you create a secretion. It is mechanical. In saccharine diabetes, the sugar is the essence of the disease, and the quantity of water is only for the purpose of eliminating the sugar. It is something in the system which nature takes means to get rid of. Both these diseases are hereditary. Had seen a family presenting a remarkable example of this fact; the grandfather, son, grandson, and his two boys were all diabetics—one little girl had escaped. Treatment of polyuria is very unsatisfactory. Nothing is known to cure. The only satisfactory management is the care of the patient's general hygiene. Nothing less than persistence of 100 oz. per diem is to be called polyuria. He noticed specially the very low specific gravity in one of the reported cases (1001), which was actually lower than that of ordinary river water.

Dr. Mills mentioned a case he had observed under Dr. Stephen McKenzie. A lady had been in the habit of eating great quantities of sugar, which produced a diabetes mellitus. Urea is the expression of metabolism, and any excess of urea would show excess of metabolism.

Dr. Sloane of Blyth spoke of a case of polyuria where the amount of urine was very large and the specific gravity 1003. Iron was of no use. Bromide of potash and ergot seemed to do good.

Dr. Sheard spoke of certain cases of diabites mellitus, in which he had opportunities of examining the brain centres. Microscopical changes had been found. He thought, as microscopical investigations continued, the pathology of both these diseases would be better understood.

Dr. Geo. Ross alluded to remarks by Dr. George Johnson, of London, upon the occurrence of diabetes insipidus in connection with diseases of the abdominal organs, and where he had proved the existence of changed structure in the great semilunar ganglia of the sympathetic. Dr. Ross referred to a case of polyuria in a woman, the subject of secondary cancer of the liver. The case had been in his hospital ward, and passed large amounts of urine of specific gravity of 1002–3. He could not obtain an autopsy. He thought the co-existence of exophthalmic goitre of great interest in showing, in the same individual, disorder of another portion of the great sympathetic system.

Dr. T. Wesley Mills showed an improved method of rapidly and certainly making a quantitative test for sugar in the urine.

Dr. O. C. Brown, of Acton Vale, read a paper on *Impaction of the Pregnant Uterus in the Pelvis as a Cause of Abortion*, relating cases which had occurred in his practice and which he had successfully managed.

Dr. Playter read a paper on *The Relation of the Medical Profession to the Public.*

Dr. Gurd presented a patient in whom a remarkable murmur could be heard in the mouth and at a short distance from it, transmitted apparently up the trachea from the chest, in which, in the mitral region, a systolic murmur was heard.

Surgical Section.

This section met at 3.30 p.m., when Dr. Major of Montreal read an exhaustive paper on *Buccal Breathing : its causes, etc.*

Dr. Elsberg of New York made a few remarks, at the conclusion of the paper, confirmatory of the views held by Dr. Major.

A paper by Dr. Proudfoot of Montreal, on *Paracentesis of the Membrani Tympani*, followed.

At this stage of the proceedings, Dr. Reed exhibited an interesting case of *Inguinal Hernia*, distending the scrotum to the size of a large melon. The rupture occurred twelve years ago, and is now irreducible.

Dr. Sutherland presented a well-marked case of *Keloid*, showing patches on the chest, right gluteal region, and right shoulder.

Dr. Oldright of Toronto read a short paper entitled *Myxo-Sarcoma*, being a sequel to his paper read at last year's meeting.

Dr. Shepherd of Montreal then read a paper on *An obscure case of Femoro-Popliteal Aneurism*, in which amputation was performed. (The specimen was shown to the members present.)

The next paper read was by Dr. Gardner of Montreal, on *Cases of Uterine Myoma*, being a report of four cases operated upon successfully.

In the discussion which followed, Dr. Strange, of Toronto, after complimenting Dr. Gardner, said that in his cases he never incised the cervix, but trusted to slow and gradual dilatation. Believes in the free irrigation of the uterus after operation in order to wash away the debris and keep the parts sweet and clean.

Dr. Heywood Smith, of London, Eng., thought such method of operating was not applicable in all cases, especially in nulliparous women, in whom the parts are of necessity small. He thought that any incision made in the cervix should be allowed to heal before proceeding to operate.

On the third and last day of the meeting Dr. Buller, of Montreal, read an interesting and exhaustive paper on *Jequirity in Granular Ophthalmia.* An animated discussion followed on the *modus operandi* of this remarkable bean, in which Dr. Reeves of Toronto and Dr. Patterson of New Brunswick chiefly took part.

Dr. Elsberg exhibited a most ingenious forceps for removing foreign bodies from the throat. It is capable of being bent to any angle, while the jaws are short and move in a small compass.

We regret that our space has not permitted us to make a more extended report of the proceedings of this section, but we hope to secure many of the papers for publication in the next and subsequent numbers of the *Journal*.

Wednesday, Aug. 27th—General Meeting.

After the reading of the minutes, Dr. Roddick read the report of the Nominating Committee as follows:—

President—Dr. Osler, Montreal.

General Secretary—Dr. James Stewart, Montreal.

Vice-Presidents—For Ontario: Dr. Bray, Chatham.
" Quebec: Dr. Geo. Ross, Montreal.
" New Brunswick: Dr. Alison, St. John.
" Nova Scotia: Dr. Fraser, Windsor.
" Manitoba: Dr. Whiteford, Winnipeg.

Local Secretaries—For Ontario: Dr. Burt, Paris.
" Quebec: Dr. J. Bell, Montreal.
" New Brunswick: Dr. Walker, St. John.
" Nova Scotia: Dr. Almon, jr., Halifax.
" Manitoba: Dr. Mewburn, Winnipeg.

COMMITTEES.

On Publication—Drs. Kennedy, Montreal; Fulton, Toronto; W. H. B. Aikens, Toronto.

On Medicine—Drs. Cameron, Toronto; F. W. Campbell, Montreal; Saunders, Kingston.

On Surgery—Drs. Kerr, Winnipeg; Harris, St. Thomas; Waugh, London.

On Obstetrics—Drs. Holmes, Chatham; McKay, Woodstock; Campbell, Seaforth.

On Therapeutics—Drs. Oliver, Kingston; Sloane, Blyth; and Tye, Chatham.

On Necrology—Drs. Fulton, Toronto; Graham, Toronto; Cameron, Montreal.

On Education—Drs. Payne, Sheard and A. H. Wright, Toronto; Botsford and Allison, St. John; Arnott, London.

On Public Health—Drs. Yeomans, Mount Forest; Grant, Ottawa; Harding, St. John; Robillard, Ottawa; Larocque, Montreal; Botsford, St. John; Playter, Ottawa; Covernton, Toronto; Oldright, Toronto; Hon. Dr. Parker and Dr. Bryce, Halifax; Kittson, Winnipeg.

On Arrangements—Drs. Ferguson, Kerr, Whiteford, Mewburn, Patterson, O'Donnell, Codd, Lynch, and Jones, with power to add to their number.

It was decided that Winnipeg should be the next place of meeting, the time to be about the third Tuesday in August, the precise date to be fixed by the local committee, with the sanction of the President and Secretary.

It was moved by Dr. King of Hull, seconded by Dr. McMillan of Hull, "That the thanks of the professional members of the British Association be tendered to the Canada Medical Association and the Montreal members for the kind treatment they have received."—*Carried.*

Moved by Dr. Bray, seconded by Dr. Sloane, that the thanks of the Association are hereby tendered to the railway and steamboat companies for their kindness in giving reduced rates to the members.—*Carried.*

Moved by Dr. Earle, seconded by Dr. Ross, that the thanks of the Association be tendered to the Synod of the Diocese of Montreal for the use of the hall during the meeting.—*Carried.*

Moved by Dr. Bray, seconded by Dr. Earle, that the best thanks of the Association are due to the members of the profession of Montreal for their kind hospitality during the meeting.—*Carried.*

Moved by Dr. Roddick, seconded by Dr. Bray, that the following members be nominated a committee to revise the constitution and by-laws of the Association, viz.: Drs. Ross, F. W. Campbell and Desjardins, Montreal.—*Carried.*

The Treasurer then read the Auditor's report.

A vote of thanks to the retiring Secretary was moved by Dr. Mullin, seconded by Dr. Gardner.

Mr. Lawson Tait expressed the gratification which he had felt in being present at the meeting, and stated his intention of offering a prize of $50 in the Medical Faculty of McGill College.

Dr. H. P. Bowditch, Dean of the Faculty of Medicine of Harvard University, was called to take a seat on the platform.

Moved by Dr. Mullin, seconded by Dr. Patterson, that the thanks of the Association are due to Dr. James Bell, the Acting General Secretary, for the efficient way in which he arranged the work of the meeting, and that the Treasurer be instructed to pay the sum of $50 to Dr. Bell.—*Carried.*

Dr. Osler gave an abstract of his paper on *Pneumonia as a Contagious Disease.*

Dr. Desjardin's paper on *Keratoscopie, comme moyen de diagnostic dans l'astigmatisme*, was taken as read.

Dr. Harrison moved that Dr. Osler take the chair. This having been done, he moved, seconded by Dr. Oldright, a vote of thanks to Dr. Sullivan for the able manner in which he had presided over the meeting.—*Carried.*

The meeting then adjourned, to meet again in Winnipeg in 1885.

CANADA

MEDICAL & SURGICAL JOURNAL

OCTOBER, 1884.

Original Communications.

THE PUBLIC ASYLUMS OF THE PROVINCE OF QUEBEC.

By DANIEL HACK TUKE, M.D., LL.D., F.R.C.P., Lond.,
Editor "Journal of Mental Science"; formerly Superintendent of the York Retreat.

[Dr. D. Hack Tuke of London, the well-known alienist and author, visited Canada with the British Association. He inspected all the lunatic asylums in Ontario and Quebec. The reports of his visits to Longue Pointe and to Beauport he forwarded to the Hon. the Provincial Secretary. With his permission, we publish these, as they cannot fail to interest our readers.—Ed.]

LONGUE POINTE ASYLUM.

On the 30th of August last I visited the lunatic asylum at Longue Pointe, seven miles from Montreal, called the *Hospice des Alienés de St. Jean de Dieu.* It was built by the Sœurs de Providence, and opened in 1876. The Province of Quebec contracts with them to maintain the lunatic poor* in one of the two parts of the Province into which it is divided; the asylum at Beauport, near Quebec, providing similarly for the other district. Private patients are admitted. The building, which, surmounted by three cupolas, is a prominent object from the St. Lawrence in approaching Montreal from Quebec, is built of red

* At the rate of 100 dollars or £20 per annum per head at Montreal and 130 dollars at Quebec—a very insufficient sum, it would seem, for board, lodging and clothing. I understand that the money originally borrowed of the Provincial Government by the Montreal Asylum has been refunded, and that money has been borrowed from private quarters to assist in the erection of the additional buildings.

brick, and consists of a centre and wings. Some of the latter have been added three or four years ago; others are now in course of erection, and will not be finished till the end of the year. Dr. Henry Howard, the visiting physician, kindly facilitated my desire to see the asylum, and escorted a small party, consisting of Dr. Ross of Montreal, Dr. S. Mackenzie of London, and myself, to the institution. I must express to Dr. Howard my lasting obligations for his attention and assistance. We were received by the Mother Superior, Ste. Thérèse, who had been apprized of our visit. She conducted us through the building; was most courteous in her manner and in replying to the numerous questions with which I troubled her. I am glad to have this further opportunity of thanking her and the nuns who were with her for their kindness throughout the visit.

The neatness and cleanliness of the hall, reception-room and office strike the visitor very favorably on entering the establishment. The *Apothecaire* is a model of neatness. The nuns have themselves published a pharmaceutical and medical work, a large volume, entitled *Traité Élémentaire de Matière Médicale et Guide Pratique*, a copy of which the worthy Mother Superior was good enough to present to me. I was somewhat disappointed to find, on examining its pages, that only one was devoted to mental alienation, of which nine lines suffice for the treatment of the disorder. Among the moral remedies, I regret to see that "punitions" are enumerated; their nature is not specified. Two skeletons in the *Apothecaire* were shown to us by Ste. Thérèse, as being much valued subjects of anatomical study for the nuns, who would, it is not unlikely, consider their knowledge of the medical art sufficient for the needs of the patients. The law, however, obliges a medical man to reside in or near the asylum. Dr. Perrault, whom we did not see, occupies this post. This officer is appointed and paid by the Sisters; the visiting physician, on the contrary, is appointed and paid by the Provincial Government. We looked down upon a very large kitchen, where cooking by steam was going actively on, and a favorable impression as to the supplies was left upon the mind by the busy scene which presented itself. The amount of vegetables (potatoes,

turnips, cabbages, &c.) produced on the land, is very large—more potatoes, I believe, than they consume. Maize, wheat, oats and buckwheat are raised. The estate consists of 600 acres. There are a large number of cows, and the asylum buys beasts to fatten and kill, thereby saving a considerable sum. I was informed that about fifty patients were usually employed out of doors, and more in harvest time. That such an establishment should be conducted by nuns must seem remarkable to those who are unacquainted with the large part taken by Sisters of Charity in the management of hospitals in countries where the influence of the Roman Catholic Church extends. Theoretically, it would seem to be an admirable system, and to afford, in this way, a wide field for the employment of women in occupations congenial to their nature, and calculated to confer great advantages upon the sick, whether in mind or body. That women have an important *rôle* in this field will not be denied; but experience proves only too surely that to entrust those of a religious order with administrative power is a practical mistake, and leads to abuses which ultimately necessitate the intervention of the civil power.

The asylum consists of a succession of corridors and rooms similarly arranged, there being dining rooms, recesses, and single and associate dormitories. There are four stories uniform in construction, exclusive of the basement and the rooms in the roof, and these four are supplied with open outer galleries or verandahs, protected by palisades. The lower stories are clean and well furnished, and the patients appeared to be comfortable. The apartments of the private patients were, of course, the best furnished. It was curious to see in the day rooms on the male side a nun with a female assistant. They are in the wards all day, and sleep together in another part of the building. In the refractory ward for men there were two male attendants, and in the other wards one male attendant, in addition to the two females. In each ward on the women's side there were two assistants with the nun in charge, and in the refractory gallery there were three assistants. The nuns and female assistants are not paid. The corridors, the width of which was fair, were carpeted down the

centre, and there were pictures on the walls in considerable number. In the day-rooms, on the floor of which was oilcloth, the furniture, though simple, was by no means insufficient. In the recesses of the corridors, as well as in the corridors themselves, were seats for the patients. Although there were rooms on both sides of the corridor, the latter was fairly lighted by the recesses, &c. The dormitories were very clean, and presented a neat appearance ; the beds were of hair, and a bright-colored counterpane had a pleasing effect. Single rooms, used as bed and sitting room, were very neatly furnished, and had every appearance of comfort. For paying patients, and for a considerable number of the poor class, I have no doubt the accommodation is good, and as I must shortly speak in terms of strong reprobation, I have pleasure in testifying to the order, cleanliness, and neatness of those parts of the building to which I now refer, and which we went over in the first instance.

It is as we ascend the building that the character of the accommodation changes for the worse. The higher the ward, the more unmanageable is the patient supposed to be, the galleries and rooms become more and more crowded, and they look bare and comfortless. The patients were for the most part sitting listlessly on forms by the wall of the corridor, while others were pacing the open gallery, which must afford an acceptable escape from the dull monotony of the corridor. The outlook is upon similar galleries in the quadrangle at the back of the building, and to a visitor, the sight of four tiers of palisaded verandahs, with a number of patients walking up and down the enclosed space, has a strange effect. These outside galleries are, indeed, the airing courts of the asylum. There are no others. If the patients are allowed to descend, and to go out on the estate, they do so in regular order for a stated time, in charge of their attendants, like a procession of charity school children. Those who work on the farms must be the happiest in the establishment.

In the fourth tier were placed the idiots and imbeciles—a melancholy sight necessarily, even when cared for and trained in the best possible manner, but especially so when there is no attempt made, so far as I could learn, to raise them to a higher

level or educate them. If, however, they are kindly treated and kept clean, I should feel much less regret for educational neglect, than I should feel pained by the state of the patients and their accommodation in the parts of the establishment next described. Far be it from me to attribute to these Sisters of Charity any intentional unkindness or conscious neglect. I am willing to assume that they are actuated by good motives in undertaking the charge of the insane, that they are acute and intelligent, and that their administrative powers are highly respectable. Their farming capacities are, I have no doubt, very creditable to them. It is not this form of farming to which I have any objection or criticism to offer. In the vegetable kingdom I would allow them undisputed sway. It is the farming out of *human* beings by the Province to these or any other proprietors against which I venture to protest.

It is impossible to convey an adequate idea of the condition of the patients confined in the gallery, in the roof, and in the basement of this asylum. They constitute the refractory class—acute and chronic maniacs. They and the accommodation which has so long been provided for them must be seen to be fully realized. To any one accustomed to a well ordered institution for the insane, the spectacle is one of the most painful character. In the course of seven-and-thirty years I have visited a large number of asylums in Europe, but I have rarely, if ever, seen anything more depressing than the condition of the patients in those portions of the asylum at Longue Pointe to which I now refer. I saw in the highest story, that in the roof, an ill-lighted corridor, in which sixty to seventy refractory men were crowded together; some were walking about, but most were sitting on benches against the wall or in chairs fixed to the floor, the occupants being secured to these restraint-chairs by straps. Of those seated on the benches or pacing the gallery, a considerable number were restrained by handcuffs attached to a belt, some of the cuffs being the ordinary iron ones used for prisoners, the others being leather. Restraint, I should say in passing, was not confined to the so-called refractory wards; for instance, in a lower and quieter ward, a man was tightly secured by a

strait waistcoat. Dr. Howard had him released, and he did not evince any indications of violence. It was said he would tear his clothes—a serious matter in an asylum conducted on the contract system! The walls and floor of the corridor in the roof were absolutely bare. But if the condition of the corridor and the patients presented a melancholy sight, what can be said of the adjoining cells in which they sleep and are secluded by day? They are situated between the corridor and a narrow passage lighted by windows in the roof. Over each door is an opening the same length as the top of the door, and 3 to 4 inches in height, which can be closed or not as the attendant wishes. This aperture is, when open, *the only means* of lighting the cell. The door is secured by a bolt above and below, and by a padlock in the middle. In the door itself is a *guichet* or wicket, secured, when closed, by a button. When opened, a patient is just able to protrude the head. There is, as I have intimated, no window in the room, so that when the aperture over the door is closed it is absolutely dark. For ventilation, there is an opening in the wall opposite the door, which communicates above with the cupola; but whatever the communication may be with the outer air, the ventilation must be very imperfect. Indeed, I understood that the ventilation only comes into operation when the heating apparatus is in action. What the condition of these cells must be in hot weather, and after being occupied all night, and, in some instances, day and night, may be easily conceived. When the bolts of the door of the first cell which I saw opened were drawn back and the padlock removed, a man was seen crouching on a straw mattrass rolled up in the corner of the room, a loose cloth at his feet, and he stark naked, rigorously restrained by handcuffs and belt. On being spoken to, he rose up, dazzled with the light, and looking pale and thin. The reason assigned for his seclusion and his manacles was the usual one, namely, "he would tear his clothes if free." The door being closed upon this unfortunate man, we heard sounds proceeding from neighboring cells, and saw some of their occupants. One, who was deaf and dumb, as well as insane, and who is designated '*l'homme inconnu*,' was similarly manacled. In his cell there was not anything

whatever for him to lie or sit upon but the bare floor. He was clothed. Some of the cells in this gallery were supplied with bedsteads, there being just room to stand between the wall and the bed. When there is no bedstead, a loose palliasse is laid on the floor. In reply to my enquiry, the Mother Superior informed me that it was frequently necessary to strap the patients down in their beds at night.

Passing from this gallery, which I can only regard as a "chamber of horrors," we proceeded to the corresponding portion of the building on the female side. This was to me even more painful, for when, after seeing the women who were crowded together in the gallery, on benches, and in fixed chairs, many of whom were restrained by various mechanical appliances, we went into the narrow passage between the cells and the outer wall, the frantic yells of the patients and the banging against the doors constituted a veritable pandemonium. The effect was heightened when the *guichets* in the doors were unbuttoned, and the heads of the inmates were protruded in a row, like so many beasts, as far as they could reach. Into this human menagerie, what ray of hope can ever enter? In one of the wards of the asylum I observed on the walls a card, on which were inscribed words to the effect that in Divine Providence alone were men to place their hopes. The words seemed to me like a cruel irony. I should, indeed, regard the Angel of Death as the most merciful visitant these wretched beings could possibly welcome. The bolts and locks were removed in a few instances, and some of the women were seen to be confined by leathern muffs, solitary confinement not being sufficient. One of the best arguments in favor of restraint by camisole or muff is that the patient can walk about and need not be shut up in a room, but we see here, as is so often seen, that unnecessary mechanical restraint does not prevent recourse being had to seclusion. A cell, darkness, partial or total, a stifling atmosphere, utter absence of any humanizing influence, absolute want of treatment, are but too often the attendants upon camisoles, instead of being dispensed with by their employment. When such a condition of things as that now described is witnessed, one cannot help appreciating, more

than one has ever done before, the blessed reform in the treatment of the insane which was commenced in England and France in 1792, and the subsequent labors of Hill, Charlesworth and Conolly. But it is amazing to reflect that although the superiority of the humane mode of treating the insane, inaugurated nearly a century ago, has been again and again demonstrated, and has been widely adopted throughout the civilized world, a colony of England, so remarkable for its progress and intelligence as Canada, can present such a spectacle as that I have so inadequately described as existing, in the year of grace 1884, in the Montreal Asylum.

Before leaving the asylum, I visited the basement, and found some seventy men and as many women in dark, low rooms. Their condition was very similar to that already described as existing in the topmost ward. A good many were restrained in one way or another, for what reason it was difficult to understand. Many were weak-minded, as well as supposed to be excitable. The patients sat on benches by the wall, the rooms being bare and dismal. A large number of beds were crowded together in a part of the basement contiguous to the room in which the patients were congregated, while there were single rooms or cells in which patients were secluded, to whom I spoke through the door. The herding together of these patients is pitiful to behold, and the condition of this nether region in the night must be bad in the extreme. I need not describe the separate rooms, as they are similar to those in the roof. The amount of restraint and seclusion resorted to is of course large. Yet I was informed that it was very much less than formerly.

To the statement in regard to the crowding of the patients in this asylum, it will be objected that I have given a description of a state of things which will shortly disappear, as additional rooms are being provided for their accommodation. While I am glad to hear that other rooms will be available before long, I am not by any means convinced that the lowest and topmost wards of this asylum will be disused for patients. There are now, the Mother Superior said, about 1,000 lunatics in the building, and when first informed that new wings were being prepared,

I concluded that it was for the purpose of providing increased accommodation for the existing number of inmates only. That hope, however, was greatly lessened, if not wholly dispelled, when I learnt from this lady that when these new wards are ready there will be room in the institution for 1,400 patients. It is said the new rooms will contain 600 beds, but how many cubic feet are allowed in this calculation I do not know. I have no hesitation in saying that when the patients are removed who now occupy the two portions of the building I have described, and when the occupants of the other galleries are reduced to the number the latter ought properly to accommodate, there would be at least 400 patients who should be removed from the old to the new building. If I am correct in this opinion, the present lamentable evils will continue after the opening of the additional apartments, or if they are mitigated for a time, they will but too surely be renewed as fresh admissions take place. Assuming, however, that overcrowding is lessened, and that these dark cells should cease to be used, what guarantee—what probability—is there, that the manacles will fall from the wrists of the patients of this asylum? I am not now speaking from the standpoint of absolute non-restraint in every conceivable instance of destructive mania. It is sufficient to hold that the necessity for mechanical restraint is exceptional, and that in proportion as an asylum is really well managed, the number whose movements are confined by muffs, strait-waistcoats and handcuffs will become fewer and fewer. The old system of treating the insane like felons has been so completely discarded by enlightened physicians devoted to the treatment of the insane, that it can no longer be regarded as permissible in a civilized country. The astonishment which I experienced in witnessing this relic of barbarism in the Province of Quebec is still further increased when I see such excellent institutions as the lunatic asylums of the adjoining Province of Ontario. I am perfectly certain that if it were possible to transfer the worst patients now in the asylum at Montreal to these institutions, they would be freed from their galling fetters and restraint-chairs. They would quit their cells also, and, in many instances,

be usefully occupied where they are now restrained, with the result that in not a few cases perfect recovery to health would follow. "Look on this picture and on this," were words constantly in my mind after visiting the institutions of the two provinces. It can hardly be contended that a system which succeeds in one province, and is attended by great success, ought not to be followed out in the other.

The question arises, why this difference in the condition of the insane in the asylums of the two Provinces? Whatever other reasons there may be for this extraordinary contrast, I have no doubt that the main cause is to be found in the different systems upon which the financial management of those institutions is based. It is a radical defect—a fundamental mistake—for the Province to contract with private parties or Sisters of Charity for the maintenance of lunatics. This, it cannot be too often repeated, is the essential root of the evil; and unless it be removed, the evil, although it may be mitigated, will remain and will bear bitter fruit. If any steps are to be taken to remove the present deplorable condition of the insane in the asylum of Montreal, it must be by the Province taking the actual responsibility of these institutions into their own hands. Whatever may be the provision made by private enterprise for patients whose friends can afford to pay handsomely for them, those who are poor ought to have the buildings as well as the maintenance provided for them by the Legislature. They are its wards, and the buildings in which they are placed should belong, not to private persons, but to the public authorities, with whom should rest the appointment of a resident medical officer.

The official inspection of this institution must now be referred to. When I was at the Quebec asylum (Beauport) I obtained a copy of the report of that establishment. The names of three inspectors of the asylums and prisons of the Province are there given, namely, Drs. L. L. L. Desaulniers, A. de Martigny, and Mr. Walton Smith. They report to the Provincial Secretary, who resides at Quebec, and is the Government officer to whose department these institutions belong. I was informed that the visits of the inspectors are due three times in the year. The

Grand Jury are empowered, when they meet, to visit asylums and make a presentment to the Court in regard to their condition, but I understood that this is generally a very formal proceeding. With regard to the authority of the visiting physician appointed and paid by the Government, it has been hitherto, so far as I could ascertain, almost, if not entirely, *nil*. His hands have been so tied that he could not be held responsible for the way in which the asylum has been managed. The Quebec Legislature passed an Act in June last which has only just come into force, and which, among other provisions, extends and enforces the authority of this officer. It remains to be seen whether this Act invests him with sufficient power to carry out any system of treatment or classification of the patients which he may deem requisite.

There should, however, in any case, be a medical superintendent, with competent knowledge of the treatment, moral and medical, of the insane, with undivided authority and responsibility inside the institution, although subject to the Government, aided by efficient medical inspection.

Should the contract system be abolished, should capable medical men be placed at the head of the institutions of the Quebec Province, and should inspection made by efficient men be sufficiently frequent and searching, the asylums for the insane of this Province would become institutions of which Canadians may be justly proud, instead of institutions of which they are now, with good reason, heartily ashamed.

BEAUPORT ASYLUM, QUEBEC.

I visited the Beauport Asylum, at Quebec, Aug. 18, 1884. It was established in 1845; additions were made to the original building in 1865 for the male patients, and in 1875 for the female patients. The medical superintendents reside in the city, several miles away, and I had not the pleasure of seeing them. There are two visiting physicians. The asylum is inspected by Dr. Desaulniers, Dr. A. de Martigny, and Mr. Walton Smith. Resident on the premises is the warden, and in the vicinity is an assistant physician. I have to express to both these gentle-

men my obligations for the kind way in which they received me, the time they devoted to my visit, and their readiness to show me the various parts of the building. My thanks are especially due to Mr. A. Thomson of Quebec, for the assistance he rendered and for accompanying me.

The asylum is a striking object to visitors to the Montmorency Falls, as they pass along the road where it is situated. The approach is pleasant and the entrance attractive, being marked by the taste and cleanliness which characterize the dwellings of the Canadians generally. The warden received us politely, and took us round the building devoted to female patients. His wife occupies the post of matron, and has two assistants under her. The corridors into which we first went are sufficiently spacious, and serve the purpose of day-rooms to a large extent, the patients being seated or walking about. The patients here were well dressed, and appeared to be as comfortable as their condition would allow. The associated dormitories are large, cheerful rooms, well ventilated, and the beds neat and clean. I supposed that the linen had been clean that morning, but was informed that it was the last day in use, and was changed weekly. Strips of carpet and mats in the dormitories, as well as in the corridors, relieved the bareness of the floor.

The position and construction of a series of single bed-rooms attached to the wards are most unfortunate. They are placed back to back, so that there is no window in them, the narrow passage which skirts them receiving light from a window at either end. There is an aperture over the door, and a small one in the door itself. The ventilation is most imperfect, and it was not denied that in the morning their condition is the reverse of sweet. Some of these cells—for cells they must be called—were very close when I visited them. How such rooms came to be built for lunatic patients, for whom good air and sufficient light are so important, it is difficult to comprehend. I was informed that they were planned to expedite the escape of the inmates in case of fire, there having been a conflagration some years ago in which twenty-six patients perished, but I failed to see the fitness of such an arrangement. It appeared to me

to be due to the desire to economize room, and I am not surprised to find, from one of the annual reports given me, that credit is claimed on the ground that the cost for care and maintenance is less than at ten asylums with which the Beauport Asylum is compared.

I have spoken favorably of the associated dormitories opening into the corridors. Those, however, in the attic were very gloomy and crowded with beds. I have also referred favorably to the dress of certain patients. I must add that in some parts of the house they were barely clad, and presented a very neglected appearance altogether.

The number of women in restraint was very considerable. Some wore the manchon or muff, others the close glove (*mitaine*); others were restrained by leather wristbands (*poignet*) fastened to a belt, while some were secured by the *gilet de force*, so that movements of the arms were effectually prevented. Several were secured to the bench on which they were seated. In one small airing court upon which I looked down, not a few were restrained ; the whole company appeared to be unattended, or if there were attendants, the latter did not consider it a part of their duty to keep their dress in decent order. In referring to mechanical restraint, I do not judge of the condition of the patient from the total non-restraint point of view. The amount resorted to in this asylum would not be seriously justified by any physician of the insane with whom I am acquainted, whatever his views on non-restraint may be.

After leaving the building in which the women are located, we walked into the grounds over a stream to a steep, grassy, airing court, which was fortunately shaded from the blazing sun of that day. Here a number of female patients were congregated, with one or two attendants. A wooden fence separates this ground from a corresponding grass plot for the men. From a window in the building for the latter sex I looked down subsequently, and the sight of the female patients lying or sitting on the grass in unseemly attitudes, and with scant and neglected attire, did not commend itself as one altogether desirable. The number of attendants is quite insufficient, and I cannot say I

was favorably impressed with their appearance. Where so much importance is attached to economy, this cannot excite surprise. Their pay is very insufficient, as well as their number.

Passing to the building for the male patients, over which the resident physician escorted us and manifested the greatest willingness to show every corridor and room, I would observe that there are certain wards which, like those for the corresponding class of women, are both clean and respectably furnished; but when I have done justice to the accommodation afforded in these galleries, I have said all that I can say in the way of commendation. The higher one ascended in the building, the lower the condition of the patient—the corridors were much crowded, and the amount of mechanical restraint excessive. In the worst ward, the sight was in the last degree painful to witness. Here were some thirty patients. Some had leathern muffs, others the belt and poignet, while several were in cells as dark as those on the women's side, and were also restrained. One had his legs secured at the ankles. There were also several men in restraint-chairs, to which they were fastened, and not only so, but they wore muffs. They were in their shirts, and over their exposed persons flies were crawling in abundance—a spectacle which it must suffice to describe without characterizing further. Among patients of the class now referred to, I counted fourteen restrained, but I do not pretend to have noted them all. For a man who was given to scratching his face, it was considered necessary not only to secure his hands by muffs, but to place him in a crib-bed.

But it is needless to describe in more detail an institution which, however willingly I may praise where praise is due, is so radically defective in structure and so fundamentally different from any well conducted institution of the present day, in the matter of moral, to say nothing of medical, treatment, that no tinkering of the present system will ever meet the requirements of humanity and science. I regret to write thus. It is a thankless task for a visitor, courteously treated as I was, to criticize any institution which the officers permit him to inspect. But I write in the hope of helping, in however humble a way, to bring about a reform in the injurious practice of the State contracting

with private individuals for the maintenance of its insane poor. The proprietors only receive 11 dollars per head per month for maintenance and clothing. This system involves the probability of their being sacrificed to the interests of the proprietors. It has the disastrous tendency to keep the dietary as low as possible, to lead to a deficiency in the supply of clothing, and to a minimum of attendants, thus inducing a want of proper attention to the patients and an excessive resort to mechanical restraint, instead of that individual personal care which is so needful for their happiness and the promotion of their recovery. I consider that the number of attendants in such an asylum should not be less than 1 in 7, instead of 1 in 15; and that a higher class should be obtained by giving higher wages. At present they are as follows: 9 to 10 dollars a month in winter for male attendants; 12 to 14 in summer. Women attendants have 5 to 6 dollars a month, or £12 to £16 10*s*. a year. With a higher class, it might no longer be an irony to speak as the chaplain does in one of the Reports, of "the good and virtuous keepers who are selected with great discernment."

I venture also to express the hope, in conclusion, that the Province of Quebec will itself undertake the responsibility of providing the necessary accommodation for its insane poor and their skilful treatment, that a resident medical superintendent, with full authority, will be appointed, and that there will be a Board of Management as well as really efficient inspectors.

JEQUIRITY IN GRANULAR OPHTHALMIA.

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(*Read before the Canada Medical Association, at Montreal, August*, 1884.)

The subject I have chosen to bring forward on the present occasion has been so thoroughly investigated during the past two years, both in the old world and in the new, that I must disclaim from the outset all pretension as to the production of really new facts. Again, so much space has of late been devoted to this theme, both in general and in special medical literature, that I fear a paper on *jequirity* begins to bear some resemblance to a threadbare garment. Nevertheless, as this new remedy and its action are still material for active controversy among several prominent ophthalmists, it may be interesting to know how the matter stands at the present time.

It would indeed be strange, if, in these days of active medical research, a remedy capable of accomplishing anything like the beneficial results claimed for it by such an authority as De Wecker of Paris should not awaken the liveliest interest among those engaged in ophthalmic practice. Such has certainly been the case, but, like all new remedies, it has had to run the gauntlet of adverse criticism, not so much on account of any fault in the remedy itself, but because it has not acted satisfactorily when inadvertently used in unsuitable cases. I myself believe the drug to be one of the most valuable therapeutic agents now at our disposal, and I have come to this conclusion after carefully watching its effects in a tolerably large number of cases subjected to this mode of treatment during the past year in the Montreal General Hospital. So potent a remedy as this has proved to be, necessarily requires to be used with care and circumspection, and for this reason I have preferred to follow almost entirely in the beaten track, so to speak, confining its application to rather old and seemingly inveterate cases of granular ophthalmia with pannus. This is probably the reason why I have formed so favorable an opinion of its action, and met with so few disappointments in its use. Among some twenty-five cases treated, including more than forty eyes, I have only been disappointed

on three occasions; of these I shall say more later on, when referring to the indications and contra-indications for the use of the remedy.

The solution I employ is made by macerating three parts by weight of the powdered beans in one hundred parts of cold water for twenty-four hours. The solution is then filtered and is ready for use. Now it seems to be a pretty well established fact that up to a certain point the intensity of the inflammation set up by solution of jequirity is in direct proportion to the strength of the solution, assuming, of course, that the beans are of the best quality; at the same time, there is, undoubtedly, a wide difference in the individual susceptibility of different eyes to its action, and experimenters have shown that it acts more violently among some of the lower animals—the rabbit, for instance—than in man. De Wecker and others have found that the activity of the solution of jequirity increases very perceptibly with its strength, up to 5 per cent., but that beyond this point there is no apparent increase in the intensity of the inflammatory process it occasions. This may be because the watery solution is really saturated with the active principle, whatever it may be, at 5 per cent, or it may be that any addition to an already severe inflammation, such as usually occurs after one application of a strong, say 5 per cent. solution, would not visibly increase the effect. Certain it is, however, that repeated applications keep up its action to the maximum degree for several days at least. Certain it is that two or more applications of a weak solution, at intervals of some hours, act more strongly than one application of the same strength; and I believe that we shall ultimately find that the real danger from the use of the drug proceeds from repeated applications of too great strength, for in the human conjunctiva the acme of jequirity ophthalmia is reached too soon to seriously endanger the cornea, and when the remedy is not repeated, nothing is more surprising than to observe the rapid manner in which the inflammatory process subsides. In reading de Wecker's last communication, "between the lines" I find that he has abandoned the earlier method of making repeated applications of the remedy during several

days, because by so doing danger to the cornea is lessened, if not entirely avoided, for he has modified one of his leading axioms by adding the words "when properly used." In dealing with eyes very insusceptible to the action of jequirity, I have not succeded in setting up inflammation with a 10 per cent. solution, where a 5 per cent. had failed, or, in those only moderately susceptible, in obtaining a stronger reaction with the former than with the latter. As a rule, the more normal the condition of the conjunctiva, the greater is its susceptibility to the influence of jequirity; conversely, the more atrophic and disorganized the membrane has become, the less likely is the jequiritic ophthalmia to assume a severe type, and not infrequently it will be found impossible to set up the characteristic inflammation at all. Fortunately, however, even in these most inveterate cases, the slight reaction induced by the stronger solutions may have a most favorable influence in clearing the cornea and ameliorating the patient's condition. The following case illustrates this point:—

A young woman, who had suffered for many years from "sore eyes," was admitted with very defective vision, caused by pannus and some superficial ulceration of the corneæ. The conjunctiva was very much atrophied, and retro-tarsal folds partially obliterated. Treatment was commenced with a 3 per cent. solution three times daily for several days, without visible effect; subsequently a 5 per cent. solution was used thrice daily for a week; this induced a moderate degree of conjunctivitis, with a watery, somewhat flocculent, secretion. During this time the eyes became less irritable and the corneæ commenced to clear up. The clearing process continued long after the remedy was discontinued, and five weeks after the patient went out with useful vision. At no time was there any appearance of false membrane developed in the conjunctiva during the progress of this case, nor did the eyelids become swollen more than would occur in a case of simple catarrhal ophthalmia of moderate severity.

The mode of preparing and using jequirity at present recommended by De Wecker is as follows: The beans are bruised

sufficiently to remove the cortex and ground in a coffee-mill. The fresh powder is then mixed with cold water, and allowed to stand for three hours. The solution is then filtered, and is ready for use. He advocates the use of a 3 per cent. solution in nearly all cases, and strongly advised that it be perfectly fresh—that is, freshly prepared for each application—and finds that one application usually suffices, though sometimes two or three are required at intervals of 24 hours. In a few cases of extreme cicatrization, or amyloid degeneration of the conjunctiva, he uses a 5 per cent. solution, but has quite abandoned the earlier plan of using a weaker solution three times daily for three days. Prepared and used in this way, De Wecker has never seen it cause eczema of the eyelids, such as may occur after the use of a stale solution, or one which has been prepared with the addition of carbolic acid. I have several times seen eczema of the lids caused by the more frequent use of a stale 3 per cent, solution uncombined with any other irritant or so-called disinfectant, and therefore infer that stale solutions acquire some irritant qualities other than those which cause the jequirity ophthalmia, though, of course, the eczema may here be due to the more prolonged overflow tears, &c., induced by the repetition of the remedy. A fresh solution of jequirity certainly does not produce any immediate irritation when applied to the conjunctiva ; only after the lapse of some hours does this occur. If we call this period the stage of incubation, its duration is anywhere between three and eighteen hours. As a rule, at the end of three or four hours the eye feels a little hot and is slightly reddened, with, perhaps, some lachrymation, but no swelling of the eyelids ; three or four hours later the eyelids have become more or less swollen, and the conjunctiva shows signs of the characteristic croupous exudation ; at the end of twenty-four hours the lids may be very much swollen and reddened, and often of a dusky or purplish color, at the same time somewhat tender and quite firm, but the *typical* picture thus presented is not at all like that of ordinary purulent ophthalmia. The swelling of the conjunctiva is not so great and the secretion not nearly so abundant. I have only once observed what could be called a purulent ophthalmia after

the use of jequirity ; on the other hand, in nearly every instance the membranous character of the inflammation was very conspicuous, the fluid portion of the exudation being of a watery character, mixed with whitish shreds and flocculent material. In one case, the membranous exudation, of a tough yellowish material, was so abundant that the cornea was completely hidden for two or three days, and only came into view after the removal by forceps of great flakes of exudation which completely filled the conjunctival sac. In this case there was slight ulceration of the cornea, but the final result was most brilliant, an inveterate pannus of several years duration being completely cured, and the patient restored to perfect comfort and excellent vision in the space of three weeks.

There are two distinct theories respecting the nature of jequiritic ophthalmia, and the subject is at the present time exciting an active controversy. Sattler of Erlangen, after some elaborate investigations, came to the conclusion that the infusion of jequirity acts by inducing a septic inflammation excited by the growth of a bacillus, which is found to develop rapidly and in great abundance in any solution of jequirity that has been exposed to the air. De Wecker himself is a strong upholder of this theory, but the supposed facts upon which it is based have not sufficed to carry conviction to the minds of other investigators, who argue that jequirity owes its activity to the presence of some peculiar chemical compound of an irritating nature, which chemistry has probably not yet succeeded in isolating. Without entering at length into the controversy, I will state some of the facts on both sides of the question ; but before doing so, I may say that my impression is, the opponents of the bacillus theory have the best of the argument.

1. The adherents of the bacteria, or infection theory, point out that a solution of jequirity, when exposed to the air, soon becomes loaded with a peculiar form of bacillus, and that the same micro-organism exists in the secretion and in the false membranes of jequiritic ophthalmia.

2. The inflammation occurs only after a stage of incubation, after the manner of septic poisons generally.

3. The stage of incubation is shortened by free exposure of the conjunctiva to the external air.

4. The stronger the solution the more active the resulting inflammation.

5. That the non-contagiousness of jequirity ophthalmia can be explained by the peculiar character of the inflammatory products.

The advocates of the chemical or organic-ferment theory have shown that an infusion of jequirity is most active when free from bacteria, and that stale solutions, which are replete with the characteristic bacillus, become less active or wholly inert. I may add to this that the very freshness of the infusion advocated with emphasis by De Wecker himself precludes the existence of bacteria at the time it is used, and it is inconceivable that so small a quantity of the drug as can only remain in the conjunctival sac a few moments after it has been applied should form a sufficient nidus for the development of the enormous numbers of these organisms probably necessary to produce the acute inflammation that actually occurs. Moreover, De Wecker and his co-workers admit the difficulty of finding the bacillus in the secretion or false membranes of jequiritic ophthalmia: other observers say, "We could not find any bacillus either in the pus or in the diphtheritic layer from the conjunctiva when examined under the microscope.

The secretions of jequiritic ophthalmia are not contagious at any stage of the disease, at least they never excite a similar inflammation, as in the so-called inoculation from purulent ophthalmia, nor does the jequirity bacillus obtained by culture produce any of the characteristic results even when introduced into the conjunction in large quantities.

The active principle of jequirity is supposed to reside in an amorphous ferment which is not soluble in alcohol, ether, chloroform or benzine, but is soluble to some extent in water and freely in glycerine. A precipitate obtained by adding alcohol to a glycerine solution, when purified and redissolved in water or glycerine, gives the characteristic jequirity inflammation. Of the substance soluble in glycerine, it is said so small a quan-

tity as the $\frac{1}{6000}$ part of a grain is capable of producing the characteristic inflammation. That a strong solution of this substance should excite more inflammation than a relatively weak one is not inconsistent with what we know of other vegetable irritant poisons, and certainly does not require the presence of bacteria to render the action comprehensible. As for the stage of incubation, we also have the same phenomenon in the action of other irritant organic substances—for instance, the acute inflammation caused by cantharidin; but, so far as I am aware, no one pretends to argue that the stage of incubation here has anything to do with the presence of bacteria, or that an extension of the inflammatory process beyond the limits of the local application must be traceable to a similar cause, as De Wecker does when he alludes to the constitutional symptoms and the widely extended erysipelatous inflammation that sometimes follows the use of jequirity. It seems to me that some idiosyncrasy on the part of certain individuals, as yet unexplained, must be taken into account in such cases. If the constitutional symptoms are really due to a general septic condition of the blood, induced by the jequirity, it is hardly likely that serious or even fatal results should not now and then occur, but up to the present time, so far as I am aware, nothing of the kind has ever happened.

After a good deal of experience in the treatment of granular ophthalmia and pannus by inoculation, a method of treatment which in suitable cases is well known to yield most brilliant results, I have often thought how satisfactory it would be to possess a remedy capable of accomplishing a cure in the same way without the attendant dangers of inoculation, a remedy whose action we could control with something like certainty. In jequirity we have a near approach to this desideratum, not a universal panacea for granular ophthalmia by any means, but a safe, speedy and almost certain cure for this disease in its worst and most inveterate forms. Dense trachomatous infiltration of the conjunctiva with persistent or relapsing pannus, or highly atrophied conjunctiva, with a few firm scattered granulations, and a rough, sometimes ulcerated, sometimes infiltrated, and more or

less vascular cornea—a jaded, careworn, half-blind and wholly despondent patient, with a woeful history of time lost and money spent in vain; these are the things which have brought bitterness into the lives of every ophthalmic surgeon in the days of sulphate of copper and astringents; but now that is all changed, and we can bid these unfortunates to be of good cheer, for it is just in these cases the best results of jequirity are achieved, if we are to believe the records of current literature and if my own experience is of any value. Nevertheless, I cannot entirely endorse the statement that the use of jequirity is devoid of danger to the cornea, even in promising cases—that is, with trachoma of old standing and vascularized cornea. Since I find on record several instances in which destructive ulceration has occurred, and in one case I have myself seen perforating ulcer occur in a cornea never before ulcerated, but moderately vascular in its upper part; curiously enough, too, the ulceration occurred through the vascularized portion. Here, however, it is only fair to say the subject was an out-patient, and remained away two days, using the remedy which had acted well in the other eye, at his own discretion. The ulcer healed without anterior synechia, and the eye was doing well when last seen. One other case in which the remedy seemed to do more harm than good was a case of florid granulations, with pannus and a good deal of irritation going on at the commencement of treatment. Here the result was in conformity with the dicta: "Jequirity should not be used where the cornea and conjunctiva show signs of acute inflammation." "That it does not benefit those cases of granular ophthalmia in which succulence of the retro-tarsal folds with increased secretion predominate over those of trachoma."

So far as I have had an opportunity of observing, I feel satisfied there is no other remedy so efficient for clearing a trachomatous pannus; it is more rapid and more certain than peritomy, and far less dangerous than inoculation.

When used with proper care it is a safe remedy, and is not contraindicated by the presence of ulceration of the cornea. It may cure the granulations and remove pannus without producing

its characteristic form of inflammation, but, as a rule, the best and quickest results are seen after strong attacks of jequirity ophthalmia. Those who wish to use the remedy with safety will do well to begin with a two or three per cent. solution of the pulverized decorticated beans, making only one application daily and watching the effect, remembering that when once the characteristic inflammation has been set up it need not and should be perpetuated by repeated applications. If the cure is only partial after two or three weeks, the same process may be repeated. When the remedy fails to set up severe inflammation, its use is devoid of danger, and frequent repetition admissible. In some cases partially cured by jequirity, but in which the clearing process seemed to have come to a stand-still, instead of repeating the remedy, I have used oxide of mercury ointment (gr. x ad ℥i) with excellent effect, and that in cases which the same ointment had failed to benefit prior to the use of jequirity. With regard to the use of jequirity in other eye affections, I have, for the present, nothing to say, though I can quite believe it may be found of service in other conditions associated with loss of transparency of the cornea. It has also been favorably spoken of in certain affections of the skin, and in ozœna, but so far I believe its value has not been fairly tested except in diseases of the eye.

TWO CASES OF DIABETES INSIPIDUS, ONE COMPLICATED WITH EXOPHTHALMIC GOITRE.

By Dr. WORTHINGTON, of Clinton, Ont.

(*Read before the Canada Medical Association, Montreal, August* 1884.)

Mr. President and Gentlemen,—In a practice of nearly thirty-four years, I have only met with two cases of polyuria, and these were observed in the same year, one being complicated with exophthalmic goitre, the other with retroversion of the uterus. The opportunities for observing and studying the pathology of this disease appear to have been few. No recent light, that I am aware of, has been thrown upon the pathology of it, and *post-mortem* appearances appear to be contradictory. Neuffer, in a case of his, found the kidneys small and atrophied, while in another case mentioned by Lebert, they were enlarged

and hypertrophied. Niemeyer says "the most specious hypothesis as to the pathogeny of insipid diabetes is that which ascribes the polyuria to derangement of innervation of the blood-vessels of the kidneys. If the afferent vessels of the Malpighian capsules were to become dilated in consequence of paralysis of their walls, the pressure within the glomeruli would increase, and with it the rate of filtration of the urine would augment, thus giving rise to polyuria." Bernard "found that by pricking the floor of the fourth ventricle, above the 'sugar puncture,' he could produce copious diuresis, and, in certain animals, injuries to the central lobe of the cerebellum are followed by a like result." It is quite easy to suppose that the vaso-motor supply to the arteries entering the capsules and the Malpighian tufts within the capsules is so deranged that the vaso-dilators are not antagonized by the vaso-constrictors, or are, in fact, paralyzed, the consequence being that the blood-supply is furnished to the full extent of dilatation of which the vessels are capable; but this is not so easy to prove, and is not yet proven. The conclusion at which pathologists appear to have arrived is, "that in all probability paralysis of the vaso-motor nerve fibres is the main cause of diabetes insipidus." This diathetic tendency is, according to Mr. Alexander Silver, derived by inheritance. He says, "Perhaps the most extraordinary example of this is recorded by Dr. Gee, where the disease was directly transmitted through four generations. Sometimes one member of the family escaped, but the children were sure to be attacked. A newly-born infant, a member of this family, suffered from unusual thirst, so much so, that water had to be given to still it." He further says, "Beyond inheritance, nothing very definite can be said as to the cause and origin of polyuria."

Case I.—W. S., male, aged 27, came to my office April 14th, 1883. Noticed some four months ago that he had to rise three or four times at night to urinate, but thought little of it till about six weeks since, at which time he hired to a farmer near Clinton, but before going to work he consulted me for indigestion. After commencing work, he received a kick on the arm from a horse, which disabled him, and the idle time he improved by getting married and settling in Clinton.

May 15*th*.—Consulted me as to being obliged to rise six and eight times each night to urinate. A specimen was tested for albumen, with negative result. Specific gravity 1010, acid reaction; the microscope revealed nothing. No pain on voiding, but felt feverish at night. Pulse 114; temperature 99⅗°. Gave him Pot. Chlor. with no effect; changed to Fl. Ext. Buchu with no better success. I had several times asked him how much urine he passed, if it was more than three pints in twenty-four hours, and he thought not. Not being able to account for his condition, I measured eight ounces of water into a bottle and gummed a strip of paper at the top of the water. I gave him the bottle, with instructions to measure the quantity he passed in the next twenty-four hours, and was surprised to get a report of 6½ pints. This was on May 20th. Specific gravity, 1010. Moore's, Trommer's and the yeast tests were made for sugar, with negative results. Dry diet, with about the normal quantity of water, was prescribed, and Dr. Henry Kennedy's nitric acid treatment adopted—5i to a quart of water, this amount to be taken in 24 hours. Had an attack of dysentery on the 22nd; acid stopped till better.

May 24*th*.—Pulse 118; temperature 99⅕°. Passed five pints; specific gravity 1014. Has been very thirsty from the first, but is less so now at intervals. About this time my attention was directed to a considerable enlargement of the thyroid gland, which appeared to be more than usually vascular. This caused me to examine into the very prominent and staring condition of his eyes, so much so that the lids could only cover them with difficulty. I had often noticed the strange appearance of his eye, but without thinking of exophthalmic goitre. My friend Dr. Hurlburt, happening to be present, at once noticed the presence of Graves' disease. The goitre was much less than usual in this disease, but the exophthalmos was very marked. He was now placed upon one drachm of the fluid extract of ergot thrice daily. His urine was (June 11th) reduced in quantity to about four pints.

June 12*th*.—Pulse 98; temperature 98⅗° ; specific gravity of urine 1018. His weight when taken sick was 180 lbs.; he now weighs 140 lbs. His excessive loss of flesh, combined with

the rather high specific gravity of his urine and entire absence of sugar, led me to think there must be a somewhat excessive excretion of urea, which would account for the rapid waste of tissue. I found this to be the case on testing for urea.

I saw him but once after this date, on the 16th, when he was still improving. I heard from him after he left Clinton, and that he had taken a trip up the lakes with benefit, and that he had commenced to work on the farm again.

Case II.—Mrs. J. S., aged 30, had a still-born infant eight years ago; instrumental delivery of over two hours' duration. Has not been pregnant since. About two months ago she noticed an increase in the quantity of urine, accompanied with great thirst; the quantity gradually increased till she now (18th September, 1883) passes twenty pints in 24 hours, with a specific gravity of 1002. She complains of pain in her back, and when she works harder than usual, or remains on her feet long, feels something pulling down. Has had leucorrhœa constantly since her confinement. General health poor; very little appetite, and digestion bad. Pulse 84; temperature 98⅕°. Tongue has a yellowish coating, and very dry at night. On making a speculum examination, and passing the sound, I found retroversion of the uterus and unilateral laceration of the right side of the cervix. On account of the very contracted antero-posterior diameter of the pelvis, I had no pessary that I could use, and only directed for the time hot water enemata twice daily. Prescribed for the polyuria 20 minims of the fluid extract of Ergot thrice daily, and Quinia and Lactopeptine for her stomach. 25*th*.—Pulse 62; temperature 97⅖°. Is doing her housework since the 18th. The quantity of urine has varied from 20 to 22½ pints daily. Appetite better, and she can eat without vomiting. Remembers being thirsty as far back as the 1st of May last, but did not have to rise at night to urinate till about the middle of July. 28*th*.—Pulse 66; temperature 97⅘°. Has been vomiting; felt very well till after taking the ergot, which had been increased to a dram thrice daily. Directed it to be taken in divided doses one hour apart. Thirst has varied—some days very little and on other days very great. Passed on the

29th 18¾ pints; 30th, 25 pints; October 1st, 25¾ pints; 2nd, 25 pints; 3rd, 25 pints; 4th, 25 pints; specific gravity 1001.

October 6th.—Pulse 100; temperature 99⅘°. Stopped the ergot, and gave gallic acid grs. xv three times daily. From the 6th to the 11th, the quantity varied from 20 to 20¼ pints; from the 11th to the 23rd, the quantity fell to 17½ pints. Her appetite, which has been very fair, has partially failed. Tongue coated light brown and very dry at night. Her skin has been continuously dry and harsh. There has been no menstrual discharge since the 15th July. From the 23rd to the 29th, the amount of urine discharged daily was 15 pints, except on the 28th and 29th, when it was 17¼.

November 8th.—Has been vomiting, feels chilly, and wants to drink more. The daily quantity is gradually decreasing; specific gravity 1005. She is very weak; scarcely able to walk about. Has decided to go home to England.

I did not think it necessary to test the urine for sugar on account of the low specific gravity. The patient has been to England and returned, and her present condition is as follows: She is much improved in her general health; appetite good; bowels regular, and thirst not so great, but is still present. She is now passing about 10 pints daily. She has made up her mind to eat and drink what she likes, and, consequently, is taking freely of tea and coffee, and eating what suits her taste.

ON RAILWAY SPINE.

By J. CAMPBELL, M.D.C.M., and L.R.C.P., Edin., of Seaforth, Ont.

Written for the meeting of the Ontario Medical Association, held at Hamilton on the 4th and 5th June, 1884.

The ever-interesting and ever-important subject of what now generally goes by the name of "Railway Spine" has, during the last year, been attracting renewed interest. This has been owing in a great measure to the publication of Page's work "On the Injuries of the Spine and Spinal Cord." Mr. Page has been for a number of years a surgeon to one of the greatest railway corporations in England, and, therefore, has had a very extended experience of all possible railway injuries, and particularly of cases of so-called "railway spine." He contends that cases of

what are commonly called concussion of the spine do not exist, except in the imagination of the surgeon making the diagnosis. By "concussion," he means the cord receiving an injury of such a nature as to give rise to pronounced symptoms, without, at the same time, the vertebræ, ligaments or membranes receiving any hurt. It is well known that Mr. Erichsen has been a strenuous advocate of the theory that the great majority of cases of railway injuries having for their symptoms spinal symptoms are due to concussion of the spinal cord. The first one hundred pages of Mr. Page's book are taken up with combating this view of Erichsen's, and it appears to me that Mr. Page's attempt has been successful. He at least conclusively shows that the vast majority of cases of concussion of the spine are nothing more nor less than cases where the lumbar muscles or the ligaments of the spine have been sprained or ruptured. Erichsen contends that many cases of "concussion of the spine" received in railway accidents never recover, while Page, on the other hand, maintains that these so-called cases of "spinal concussion" always do recover. While representing the reaction, Mr. Page's recent work certainly favors an undue belief in the certainty of recovery in cases of this sort. Erb presents the matter more fairly than either of these writers. Accidents which occur in railway collisions, as other accidents, may lead to a long train of nervous symptoms, and when death has resulted, a post-mortem examination may show little apparent cause for the fatal result. In the greater number of these cases the pathology is a riddle, which, for its satisfactory solution, will need a great deal of experiment and careful and extensive post-mortem investigation. The great trouble in coming to an opinion as to the nature and causes of a train of nervous symptoms following a railway injury is not whether we have to do with a functional or organic change, but whether we have to do with an actual or feigned train of symptoms. Usually the patient's symptoms are of such a nature that the physician can come to a conclusion without much trouble; but when he has to do with an intelligent and unscrupulous man, who expects a large sum from a railway company, the case is one of extreme difficulty.

In many of these cases it is quite impossible to come to a certain diagnosis. In the words of a recent writer, "the needed clinical work, it seems to us, in the study of "railway spine," is the determination of clearly defined types of the disease and the investigation of the varieties from this type and the certain relation of objective symptoms to the disease." That serious and even fatal effects may arise from changes in the cord where it has not received any direct injury has been abundantly proved. In the current number of *Brain*, there is a very instructive case reported by Dr. Edmonds of a soldier who was struck in the back with a bullet. The bullet entered the back two or three inches from the spine, and the surgeon who first attended him considered that the spine was severely injured because the patient had lost complete control over both lower extremities. Patient had paralysis of the bladder and rectum also. There was cystitis and a bedsore over the sacrum before death, which occurred five months after the injury. At the autopsy, there was no fracture or indication of fracture or dislocation of the vertebræ to be found. The corda vertebralis was intact. The cord was seen to be much atrophied and softened about the level of the wound. On hardening the cord in Müller's fluid, it was seen that there was universal myelitis and softening for about two inches opposite the wound; this gradually passing below into sclerosis of the lateral and anterior pyramidal tracts, and above into sclerosis of the posterior medium columns. There was no indication of hemorrhage, either external to or into the substance of the cord. Its surface was uninjured. This was undoubtedly a case of pure "spinal concussion." The immediate paraplegia following the injury could not have been due to any other cause. The case is then one of very great importance, as it proves most conclusively that we can have, from a severe shock, sufficient changes brought about in the spinal cord to bring about death, and that these changes are, in the first place, nothing more nor less than "concussion of the spine."

Very recently the opinion appears to be gaining ground that we may have a tabes dorsalis arise from peripheral causes; that, in fact, an ulcer in the foot may be *fons et origo mali* of this

formidable disease. The origin of the disease in such a case is explained by first a peripheral neuritis gradually extending along the course of the nerves until it reaches the posterior roots, and there a similar process gives rise to a subsequent sclerosis of the posterior columns.

Reviews and Notices of Books.

Osteotomy and Osteoclasis for Deformities of the Lower Extremities.—By CHARLES S. POORE, M.D., Surgeon to St. Mary's Free Hospital for Children, N. Y.; Member of the New York Surgical Society, &c. New York: D. Appleton & Co.

Dr. Poore makes "the want of a concise treatise on osteotomy" the chief reason for writing his book. Still, a little further on in the preface, he frankly acknowledges that "very free use has been made of McEwen's excellent work on 'Osteotomy.'" We have always considered the latter a model of conciseness, and hence must take exception to the author's statement. Notwithstanding this little difference of opinion, however, we like Dr. Poore's book. He has evidently had a more than ordinary amount of experience in connection with the operations of which he treats, and his results have been admirable.

He devotes the first chapter to a review of the symptoms of rickets, but lays no claim to anything original here. Thence he proceeds at once to a history of osteotomy from the time of Le Mercier's first operation for a badly united fracture of the tibia in 1815 to the present day. With reference to deformities at the hip joint, the author is rather opposed to operating where coxalgia has been the cause, as he is aware of several cases in which the original disease was lighted up by the osteotomy. He prefers the osteotome or chisel to Adams' saw in operations here, and divides the femur between the trochanters.

The important subject of knock-knee is discussed at considerable length. For the correction of this deformity, McEwen's supra-condyloid osteotomy is recommended above all other operations, and has been performed not a few times by the author.

His management of the wound, however, we cannot admire, being far too meddlesome. MacEwen, and the majority of those who perform his operation, use the strictest antiseptic precautions, and aim to leave the wound undisturbed for at least a fortnight. Dr. Poore, however, does not regard these measures as of such importance, and as a consequence, doubtless, has had high temperature and suppuration in some of his cases.

The last chapter but one is devoted to the subject of "osteoclasis," or bone-breaking—both manual and instrumental. When in Paris recently we were shown one of Rizzoti's osteoclasts, and we certainly were not favorably impressed with it as a surgical appliance. Still, many French surgeons of eminence employ it for the correction of all deformities, irrespective of cause, situation, or character. They prefer osteoclasis to osteotomy even for the correction of knock-knee. It would be interesting to know in what percentage of cases the epiphyses of femur and tibia are separated in these operations. Manual osteoclasis we have practised ourselves in the bow-leg of children under four years, and with the most gratifying results. This has, of course, one great advantage over osteotomy, in that a simple fracture only is produced, but the risks incurred of doing violence to important structures should not be underrated.

The book is handsomely gotten up, printed in good type and on superior paper, but perhaps its greatest recommendation is that it contains five admirably executed plates and 50 woodcuts.

The International Encyclopædia of Surgery: A systematic Treatise on the Theory and Practice of Surgery.—By authors of various nations. Edited by JOHN ASHURST, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with chromolithographs and woodcuts. In six volumes. Vol. IV. New York: Wm. Wood & Co.

The fourth volume of this great standard surgery, as it surpasses in size its predecessors, so also does it equal them in the value and thoroughness of the articles and the eminence of the names of those contributing them. Want of space alone prevents

our giving a more extended notice of some of the special features of this interesting section of the Encylopædia. We must, however, content ourselves with appending the list of authors and subjects. Injuries of Bones, by John H. Packard, M.D., Philadelphia. Diseases of the Joints, by Richard Barwell, F.R.C.S., London. Excisions and Resections, by John Ashurst, jr., M.D., Philadelphia. Excision of the Knee-Joint, by G. E. Fenwick, M.D., Montreal. Tumors, by Hy. T. Butlin, F.R.C.S., London. Injuries of the Back, including those of the spinal column, spinal membranes, and spinal cord, by John A. Lidell, A.M., M.D., New York. Malformation and Diseases of the Spine, by Fred. Treves, F.R.C.S., London.

Clinical Lectures on Mental Diseases.—By J. S. Clouston, M.D., &c. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Brothers.

Of all the many recent works on insanity, Dr. Clouston's is, without doubt, the one best adapted for the wants of the general practitioner. It is, in an eminent degree, a clinical manual, and as such will fulfil a long-felt want. The author, as Physician Superintendent of the Royal Edinburgh Asylum, has had great opportunities of becoming thoroughly acquainted with insanity in its myriad forms, and as lecturer on mental diseases in the University, we have in a measure a guarantee that he not only knows what medical men should be acquainted with on this subject, but also how best to impart this knowledge to them. Those who have had the privilege of listening to his admirable clinics will hail with great satisfaction the appearance of this volume, as in it they will expect to find the great subject of alienism treated in a lucid and practical manner. In this they will not be disappointed, for Dr. Clouston presents the subject in a way which has seldom been equalled, certainly never excelled. An excellent account is given of that ever-interesting malady, general paralysis of the insane. He shows that it is a true disease, and not a mere group of symptoms. Being a distinct disease, clinically and pathologically, it can be defined, and the following is Clouston's definition of it: "It is a disease of the

cortical part of the brain, characterized by progression, by the combined presence of mental and motor symptoms, the former always including mental enfeeblement and mental facility, and often delusions of grandeur and ideas of morbid expansion or self-satisfaction ; the motor deficiencies always including a peculiar defective articulation of words, and always passing through the stage of fibrillar convulsion, incöordination, paresis, and paralysis ; the diseased process spreading to the whole of the nervous tissues in the body ; being, as yet, incurable, and fatal in a few years."

Many illustrative examples of the different stages and varieties of this trouble are given in detail. The history of cases are also narrated, which show how at times, in the early stages, the diagnosis is difficult and, it may be, impossible. In dealing with the insanities of puberty and adolescence, Dr. Clouston gives a graphic account of the pernicious influences in many cases of the modern boarding-school education. He shows that it is responsible for much of the nervous and mental derangements of civilized young women. He asks, " Why should we spoil a good mother to make an ordinary grammarian ?" In the treatment of the insanity of adolescence, he considers cod-liver oil a very valuable agent. If a young man or woman suffering under the insanity of adolescence is found to gain one or two pounds a week within the first three months, he considers the case to be curable, and the recovery quicker and more permanent than under any other mode of treatment.

There is an excellent chapter devoted to the medico-legal and medico-social duties of medical men in relation to mental diseases. Instances of " facts " put into lunacy certificates by medical men are sometimes very ridiculous. Dr. Clouston gives the following examples : " He is incoherent in his appearance." " Eyes restless and wandering, but following the usual occupation of breaking stones." " She says she is in the family way (she had a baby in a few months)." " Reads his Bible, and is anxious about the salvation of his soul."

The American editor has an appendix containing an abstract of the statutes of the United States and of the several States and Territories relating to the custody of the insane.

A Practical Treatise on Surgical Diagnosis: A Manual for Practitioners and Students in Medicine.—By AMBROSE L RANNEY, A.M., M.D., Professor of Practical Anatomy in the N. Y. Post-Graduate Medical School, &c. Third edition; thoroughly revised and enlarged, and profusely illustrated. New York: William Wood & Co.

This system of surgical diagnosis by a well-known writer upon surgical and anatomical subjects has been well received by the American profession, and adopted by some of the medical colleges as a text-book. The proof of its popularity is its having reached a third edition in the short space of five years. Its chief merit consists in the diagrams that are given on almost every page for purposes of comparison and differential diagnosis. These catch the eye and impress the memory. The principal new features in this edition consist in chapters upon the diseases of the brain and spinal cord and their envelopes, and the introduction of illustrations, which are numerous, and aid in the explanation of the text.

Drugs and Medicines of North America. A Quarterly devoted to the Historical and Scientific discussion of the Botany, Pharmacy, Chemistry and Therapeutics of the Medicinal Plants of North America; their constituents, properties and sophistications.—By J. U. and C. G. LLOYD, Cincinnati, O.

Pressure on our pages has alone prevented our earlier noticing the appearance of this new periodical. It is entirely devoted to a special department of Materia Medica and Therapeutics, and will undoubtedly find many interested readers. So many very valuable remedies have of late years been introduced in this country from the vegetable kingdom that a full review of the known medicinal indigenous plants of America cannot fail to prove extremely useful. So far as we can judge from the two numbers before us, the authors appear desirous of carrying out their task conscientiously and well: neither over-rating the value of claimants for the physician's favor, nor overlooking the

good qualities of those not yet fully admitted to a share of recognition. The quarterly is very handsomely printed, and the illustrations are both numerous and of a high grade of excellence.

Epitome of Skin Diseases, with Formulæ for Students and Practitioners.—By the late TILBURY FOX, M.D., F.R.C.P., and by T. COLCOTT FOX, M.B., M.R.C.P. Third American edition, revised, and with additions. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Brothers.

The fact of this manual having reached a third edition is the best proof of its favorable acceptance by the profession. One of its chief virtues is conciseness, and the diseases being arranged and described alphabetically makes it especially convenient for the student and busy practitioner. The "cutaneous pharmacopœia," which occupies the third part of the manual, contains a variety of formulæ which are numbered, and to which the reader is referred in the text. A section is also devoted to diet, having special reference to skin diseases. It is, in fact, a concise and truthful epitome of the subject as put forth in the late Dr. Tilbury Fox's larger work on "Diseases of the Skin," than which it would be difficult to find anything more excellent. We would especially advise all students to possess a copy.

Sexual Neurasthenia, with a chapter on Diet for the Nervous.—By GEORGE M. BEARD, A.M., M.D., formerly Lecturer on Nervous Diseases in the University of the City of New York, &c. (Posthumous manuscript.) Edited by A. D. Rockwell, A.M., M.D. New York: E. B. Treat.

Four years ago the late Dr. Geo. M. Beard published his work on nervous exhaustion, christened by him Neurasthenia. Some of the chapters of this book were taken up with the description of those cases of neurasthenia which were considered to be referable to irritation or disorder of some kind of the genital organs. This later work, which has been edited from his posthumous manuscript by Dr. Rockwell, contains still further observations

upon the same subject. It is no doubt an important subject, and one that every practical physician should have some acquaintance with. Our author, having made a special study of these peculiar forms of nervous and psychical derangement, seems to have fallen into the mistake of exaggerating in many cases the reality of the symptoms and the necessity for their treatment. The symptomatology is elaborate, and the variety of treatment equally so. A great many physicians of wide experience are of opinion that a decided majority of all cases of so-called neurasthenia are really cases of spermatophobia and syphilophobia, and that by moral means and the judicious employment of the practitioner's own personal influence more good can be done than by the carrying on of complicated schemes of therapeutics—dietetic, hygienic, electric, and medicinal,—all of which is only too apt to act injuriously upon the sensitive imagination of these individuals. Though not agreeing everywhere with Dr. Beard as to the management of these cases, still we think his treatise presents fairly the ideas of those viewing the matter from his standpoint, and is deserving of the attention of the profession.

Manual of Physiology: A Text-book for Students of Medicine.—By GERALD F. YEO, M.D., F.R.C.S., Professor of Physiology in King's College, London, &c. Philadelphia: P. Blakiston, Son & Co.

The author of this manual, the Professor of Physiology in King's College, London, has discharged the task of writing a work to serve as a text-book for medical students in such a manner as to show that he is acquainted with the practical difficulties attaching to such an undertaking and knows how to overcome them. The work carries out the author's theories as to what a text-book on physiology for medical students should be in a most consistent manner, and if we agree with these views, we cannot but have a very high opinion of this work. We think there is now a tendency, somewhat too marked, to encourage the use among students of very condensed statements of knowledge, which is apt to foster the existing strong enough bent to

cramming for examination. However, Dr. Yeo's book, if used properly in connection with judicious lectures, as it is no doubt meant to be, will serve an excellent purpose. The balance of matter in it is so admirable, that the work may be said to give a fair representation of modern physiology as to its main facts and conclusions. Even methods are not left untouched, and the illustrations of the *graphic method* in the chapter on Muscle must prove very interesting to the student. The neat and portable form of the work, and its numerous well executed illustrations, must tend to bring it into extensive use in our medical schools.

Medical Diagnosis: A Manual of Clinical Methods. By J. GRAHAM BROWN, M.D., F.R.C.P., Ed., Fellow of the Royal Society of Edinburgh. Second edition. Edinburgh: Bell and Bradfute. Montreal: Dawson Bros.

Last year we had occasion to draw attention to the appearance of this new handbook of medical diagnosis. We then expressed a high opinion of its merits, and are glad to see that the appreciation of it has been evinced by the call for a second edition within such a short time. It is just the book which should at once be in the hands of every senior hospital student. It gives him just the information he wants, and furnishes him with just the assistance he requires in studying his cases and making out his clinical reports. To him and to the young practitioner this manual will surely prove of the greatest service. It only remains to add that this edition is somewhat enlarged, and has evidently been revised, whilst at the same time its value has been increased by the introduction of several very useful woodcuts. It may be obtained from Dawson Brothers, of this city.

Books and Pamphlets Received.

FIFTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF ILLINOIS.

PRACTICAL MANUAL OF DISEASES OF WOMEN AND UTERINE THERAPEUTICS.—By H, MacNaughton Jones, M.D., F.R.C.S.I. NewYork, D. Appleton & Co.

DISEASES OF THE HEART AND THORACIC AORTA.—By Byrom Bramwell, M.D., F.R.C.P.E. New York, D. Appleton & Co.

THE NATIONAL DISPENSATORY, containing the natural history, chemistry, pharmacy, actions and uses of medicine.—By Alfred Stillé, M.D., and John

M. Maisch, Ph.D. Third edition, thoroughly revised, with numerous additions. Philadelphia, Henry C. Lea's Son & Co.

Materia Medica and Therapeutics, an introduction to the rational treatment of disease.—By J. Mitchell Bruce, M.A., M.D. Philadelphia, Henry C. Lea's Son & Co.

An Introduction to Pathology and Morbid Anatomy.—By T. Henry Green, M.D., Lond. Fifth American from the sixth revised and enlarged English edition. Philadelphia, Henry C. Lea's Son & Co.

The Medical Graduate and his Needs.—By Geo. C. Wellner, M.D. Detroit, Mich., George S. Davis.

A Practical Treatise on Fractures and Dislocations.—By Frank H. Hamilton, A.M., M.D. Seventh American edition. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Bros.

Handbook of the Diagnosis and Treatment of Skin Diseases.—By Arthur van Harlingen, M.D. Philadelphia: P. Blakiston Son & Co. Montreal: Dawson Bros.

The Ear: its Anatomy, Physiology and Diseases. A Practical Treatise for the use of Medical Students and Practitioners.—By Chas. H. Burnett, A.M., M.D. Second edition, revised. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Bros.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 23rd, 1884.

T. A. Rodger, M.D., President, in the Chair.

Dr. R. L. MacDonnell exhibited a patient with *Keloid Tumors*, supposed to be of idiopathic origin. The patient, aged 40, had been under treatment at the Out-patient Department of the Montreal General Hospital for a tubercular syphilide upon his forehead, which is now rapidly disappearing under the iodide of potassium. It was found that he had two keloid tumors upon his body, together with the remains of a third. The first of these appeared upon the buttock, when he was 15 years of age. It was at first painful, but as it enlarged became less sensitive. After ten years it began to shrink. Nothing now remains of it but an elongated scar. Upon the breast, lying horizontally across the sternum, just below the junction of its first and second pieces, there is a tumor which is well defined, raised above the surrounding skin, firm, smooth and elastic, and of a pink and white color. It is 7 inches long, ½ to 1 inch wide, and consists of two masses, each about half the size of an egg, connected by a band of tissue which resembles greatly the cica-

tricial bands seen in large scars. It made its first appearance fifteen years ago, and has been steadily growing ever since. It is more itchy than painful, and is by no means tender on pressure. A third tumor exists upon the left shoulder. It is but 4 inches long, but of exactly the same shape and appearance of that over the sternum.

Dr. Hingston said he had never seen idiopathic keloid; never saw keloid disappear. In traumatic keloid the skin is never moveable, as in this case.

PATHOLOGICAL SPECIMENS.

Dr. Sutherland exhibited the following specimens:

Kidneys and Heart from a case of Chronic Bright's Disease.—Symptoms: shortness of breath for one year; frequent micturition at night for several years. Before death, developed acute pericarditis and effusion into right pleura. Suppression of urine for 36 hours before death. Suffered acute dilatation of right heart. Kidneys reduced in size; weigh 100 gms., and are typical specimens of cirrhotic kidney. Heart shows slight degree of pericarditis; no effusion. Dilatation of both ventricles, especially of right, which extends 1½ inches to right of sternum. Tricuspid orifice greatly enlarged. Muscle substance pale and fatty, but unusually tough, especially about papillary muscles.

Right Kidney, from a case of Chronic Bright's Disease, having the appendix vermiformis and cœcum attached to it.

Cirrhotic and Fatty Disease of the Liver.—Dr. Geo. Ross gave the following description of this case:—G. N., hard drinker past ten years; attack of acute nephritis three months before death; no dyspeptic symptoms till just before admission to the hospital. *On admission*—Skin moderately jaundiced (not noticed till that day); great distension of abdomen by fluid; legs œdematous; fever and delirium; severe diarrhœa, stools quite colorless; albumen and bile-stained epithelial casts in urine. Breathing very distressed; pulse weak. Aspirated abdomen, with some relief to respiration. Died comatose in five days, jaundice persisting. At autopsy, large quantity of fluid in ab-

domen; liver about normal size—good example of cirrhotic liver, which is somewhat fatty; obliteration of cystic duct by old inflammation; hepatic and common ducts free; intense duodenal catarrh, especially around papilla. Kidneys large, fatty and bile-stained; vermiform appendix large, and bound tightly to lower extremity of right kidney by old adhesions, which have become organized.

Myoma of Cervix Uteri, size of small orange—Removal—Recovery.—Dr. Gardner exhibited the specimen, which he had removed from a lady, aged 52. Patient had suffered from hemorrhages and pelvic distress for 6½ years. The tumor was sessile, and dilated the cervix. The diagnosis was difficult, as there were adhesions all around between the tumor and the cervix, with the exception of posteriorly, where was an opening through which the sound entered the womb. The uterus was retroverted. The tumor was removed without much difficulty, being shelled out with the finger. There was very little bleeding. Out of 74 cases, Dr. R. Lee had only seen four situated in the cervix. Dr. Gardner said that this was the fourth sessile tumor he had removed within a year, all the patients recovering. He made this statement as Mr. Tait, in his last edition, advocated the removal of the ovaries in these cases, as he had found that 50 per cent. of deaths followed removal of sessile myomata from the interior of the womb.

Dr. Hy. Howard exhibited, under the microscope, a slide given him by Dr. Spitzka of New York, shewing the origins of the roots of the 6th, 7th and 8th nerves from the medulla of a cat.

Varicocele of the Spermatic Veins.—Dr. Roddick read a paper on this subject. (*See Vol. XII, p.* 648.)

Dr. Hingston said the subject was interesting, as this trouble was very often seen. He prefers, when the operation is necessary, that of tying the veins and dividing between the ligatures. He had only operated three times, and now almost questioned the necessity of ever operating. The trouble comes on, as a rule, about the age of 23, and goes away after a couple of years. He was of the opinion that it was not a cause of emissions, as

the testicle is often atrophied, and therefore not so active. The mind was more affected, as a rule, than the scrotum. The ring, or a truss or suspensory bandage, were often useful. He had never seen a case requiring castration.

Dr. F. W. Campbell endorsed Dr. Hingston's views regarding this very common condition.

Dr. Foley said that Mr. Jonathan Hutchinson's treatment was purgation and elevating the testicles.

Dr. George Ross thought the operation ought not to be swept away, for it has proved to be free from danger, and ought to be resorted to where the distress was very great. He has found palliative measures, such as the soft metallic ring, to be all that is necessary in most cases. He has not found either the truss or suspensory bandage to give satisfaction.

Dr. Hy. Howard said there was no such thing as hypochondriasis. If the patient complained of pain, there must be some physical cause. He believed that at times the operation was justifiable.

Dr. Kennedy asked why so much fear about interfering with veins. He believed that where the operation is indicated it ought to be performed without hesitation.

Dr. Roddick, in reply, said that the danger of working with veins was considerable. The writer of the article on this operation in " Holmes' Surgery " says that he had a case where two joints were lost from pyæmia following the operation.

Stated Meeting, June 13th, 1884.

T. A. Rodger, M.D., President, in the Chair.

Dr. R. L. MacDonnell exibited the following anatomical specimens made from a frozen subject:—1st, Cross section of the thorax; 2nd, cross section of the abdomen on level with first lumbar vertebræ; 3rd, vertical section of the pelvis.

Erysipelas of the Face, followed by double Cerebral Abscess. —Dr. Armstrong narrated the case. F. F., æt. 17, a student, was first seen Feb. 15, 1883. For past three weeks, from over study, has been running down in health. Has suffered from

vertex headache. To-day the bridge and both sides of the nose are red, swollen, hot and painful. 18*th*—Erysipelas has extended over both cheeks and upwards over the lower half of forehead; had slight chill this morning; temperature 104°. 20*th*—Pain at top of the head still very severe, preventing rest and sleep. He answers questions correctly, but speaks in a slow, drawling manner. Says he hears nothing with right ear. Temperature 100°; pulse 56. 23*rd*—Pulse 68, and intermittent; temperature 103.5°; opened pocket of pus in forehead. 24*th*—Mild delirium present. Let out pus at root of nose. 25*th*—Had good night; pulse 66; temperature 101.8°; answers questions rationally, but slowly. 26*th*—Gave exit to pus at inner and upper angle of right upper lid. 27*th*—Dr. Proudfoot made an incision into the orbit quite to the apex to let out pus. *March* 1*st*—Has had very restless night; much pain in the head; pulse 54; temperature 101.8°. 3*rd*—No headache; is more intelligent. 5*th*—Has had paroxysms of intense headache; Cheyne-Stokes breathing. 8*th*—Constantly moaning; no delirium; pulse 60; temperature 97.8; extremities cold. 10*th*—Troubled with vomiting; emaciation extreme. 20*th*—Growing worse. Dr. Proudfoot made three openings around the right orbit to relieve pus, which was pushing the eye forward. 30*th*—Much the same; vomiting continues. *April* 14*th*—Patient died of exhaustion after an illness of eight weeks and two days. At the *post-mortem*, the membranes of the brain were found normal, with the exception of that portion of the dura mater covering the petrous portion of the right temporal bone; here it was of a very dark color, thickened and softened. The arachnoid and pia-mater were normal. An abscess the size of a walnut was found in each hemisphere, and similarly situated on either side. They occupied the centre of the occipital and part of the parietal lobes. They were not congested. The longitudinal sinuses were healthy. Many of the symptoms usually looked for in cerebral abscess were wanting. There was an entire absence of epileptiform seizures, rigors, paralysis, or disordered sensibility; the prominent symptoms being severe headache, delirium, vomiting, a slow, defective articulation, slow pulse, and

slow, intermittent respiration. The last two symptoms were evidently due to pressure.

Dr. Ross thought the abscesses were caused from the suppuration in the orbit. In the few cases of cerebral abscess which he has had, two were in the cerebellum. The absence of typical symptoms in cases of tumors and abscesses of the brain was not uncommon.

Dr. Hy. Howard mentioned a case of supposed abscess following erysipelas of the face. He thought that all organs were liable to be affected by inflammations of the skin covering them even when bony walls intervene.

Dr. Shepherd had seen several cases of abscess of the brain, but all from ear disease. He was of the opinion that in this case it was due to pyæmia.

Dr. Proudfoot said he had often seen this patient with Dr. Armstrong, and that there had been very little ear trouble all through—nothing, in fact, to indicate disease of the ear itself. Believed the abscess was due to the erysipelas. Had examined the eye several times with negative results.

Dr. Armstrong, in reply, said why one would think the abscess due to disease of the ear was because this was so frequent a cause, and, besides, the dura mater was dark and necrosed over the petrous bone. Deafness was also present, without pressure on the auditory nerve.

High Specific Gravity of Urine.—Dr. Foley said that lately he had examined a specimen of urine of a clear amber color, containing neither sugar nor albumen, and yet having a specific gravity of 1035.

Dr. Ross said this was not very unusual. Lately he was attending a child of three years of age, who, from over-feeding, had become ill. She had an enormous appetite, but steadily emaciated. Diabetes was suspected. The specific gravity of urine was from 1037 to 1038, but contained no sugar. Examination for urea showed this present in abnormal amount. She soon recovered under appropriate treatment.

Dr. Stewart said that in all cases where there was deficient oxidation—that is, in all cases of azoturia—a high specific

gravity would be seen. Correction of the diet will cure this condition.

Hysterectomy on an Insane Woman.—Dr. Trenholme read a paper on this case, of which the following is an abstract :—

Mrs. R. M. W., of London, Ont., aged 30, was married at the age of 15, previous health being good. Shortly after marriage pregnancy ensued. Excepting heartburn, nothing unusual occurred until her delivery in the spring of 1873. During labor two severe epileptoid convulsions occurred, necessitating instrumental delivery, the child being still-born. Vomiting followed, then blindness, which latter remained for some days; she eventually recovered. Again becoming pregnant, was delivered naturally of a living child in the latter part of the same year. Epileptic fits now set in, especially at menstrual periods. On account of the rapid recurrence of these fits, a vaginal examination was made, ulceration of the os diagnosed, and treatment adopted, with improvement in local condition. No improvement in the fits. Patient took to alcohol for relief, and at last became insane. In 1882, she was sent to the asylum and entered as an incurable epileptic, with erratic symptoms. Dr. Midford of Portland, who saw the patient, recommended öophorectomy, but this Dr. Bucke did not think necessary. The patient was taken out of the asylum, womb and ovary reported contracted, and ovary attached. Vaginal öophorectomy was performed on 10th April, 1883 ; one ovary was found cirrhosed. Recovery took place, and patient menstruated at usual time, and has continued to do so ever since. No improvement mentally or with the fits, and patient was returned to the asylum. It being considered essential that the tubes should also be removed in these cases, and by abdominal incision, this was decided on. This was for the purpose of exploring the pelvis for any supernumerary ovary or remains of ovarian tissue, and if the uterus was diseased, to remove it also. The operation was performed April 23rd, 1884. There was no trace of an ovary or ovarian tissue. The uterus was enlarged and densely indurated, and tubes hypertrophied. The uterus and tubes were then removed. The operation lasted less than one hour, and was well borne by

patient; vomiting was somewhat severe afterwards, the patient, however, apparently doing well for the first 36 hours. After this time the patient steadily continued to fail; pulse 140, and temperature 102°; death ensuing 59 hours after the operation. The report states that "ever since the operation, her fits (slight ones) have been very frequent, but at no time has there been a single unfavorable abdominal symptom, and on examination after death the wound seemed to have been almost healed by first intention. Cause of death, continued and progressive shock." In speaking of this case, Dr. Bucke told me the patient had a series of epileptic fits lasting for 11 hours almost continuously, and that as she had two such attacks while in the asylum, during each of which she nearly died, he felt convinced this last attack, coming on toward the close of the second after such a severe operation, "had a great deal to do with the fatal termination." The following points connected with the operation itself are perhaps worthy of note: 1, The abdominal walls were divided in the exact median line, so that the peritoneum was reached without dividing a single muscular fibre. 2, The uterus was carried upward and retained there by means of a large rectal bougie passed up the vagina and pressed against the os uteri. 3, The uterine arteries and other vessels were secured by fine hemp ligatures, which embraced the folds of the broad ligament corresponding to each tube and ovarian ligament. 4, The uterus was divided at the inner os by a V-shaped incision, and the amputated surfaces brought together by five catgut ligatures in such a way that a simple linear incision resulted. The deeper parts of the opposed surfaces were then more closely approximated by means of quilting them with catgut, about five double or shoemaker's stitches being thus employed. 5, The deep abdominal sutures were inserted so as to carefully avoid any portion of the muscular tissue. 6, No abdominal bandage or long plaster was employed with the object of strongly encasing the abdomen, a practice fraught with no possible good, and often potent for much evil.

Upon examination of the parts removed, the Fallopian tubes were found to be occluded for about an inch from the horns of

the uterus, and also very firm to the finger. The uterus was hard and about twice as large as it should have been. The cavity of the body was almost entirely obliterated, admitting the point of the probe for about a quarter of an inch only. This condition prevented any communication whatever between the tubes and uterus. Menstruation must have been from the cavity of this neck.

I much regret the issue in this case, because some two months ago I removed the ovaries and tubes from a patient who had been suffering at her menstrual periods with increasing severity up to about six months before the operation, when suicidal mania supervened, and the monthly disappeared. I had a letter from her medical adviser a few days ago, in which he says: "Miss C. is doing well, and her mental condition much improved, though hardly up to par." It may be that there are few cases of insanity which would be cured by removal of the uterine appendages, yet, doubtless, there are some cases where the cessation of all sexual activity holds out the only hope of ameliorating their sad fate. Two classes of cases would seem to warrant the performance of the operation, viz., 1st, those cases of *imperfect sexual development* where the nervous energy is diverted and expended in fruitless attempts to perfect its growth and maturation. Here may we not hope that the removal of the uterine appendages will be found to improve the mental condition, and and, perhaps, in some cases restore to sanity. 2nd, Again, in an opposite class of cases, where the activity of the sexual organisation dominates the mental powers, may we not hope that the cessation of this controlling force will be followed by a calm and such a change in behaviour as the results of castration in the lower animals would lead us to expect. I think these points are worthy of careful study, and hope they will be tested so as to afford statistical data for future guidance.

BATHURST AND RIDEAU MEDICAL ASSOCIATION.

The eleventh annual meeting of this Association took place at Carleton Place on the 9th of July. Members were present from Pembroke, Renfrew, Arnprior, Almonte, Pakenham, Carp, Newboro' and Ottawa.

The President, Dr. Cranston, of Arnprior, delivered his annual address, detailing his efforts in the Medical Council of Ontario.

A paper was read by Dr. Grant, jr., of Ottawa, on the "Pathology of Tubercle," accompanied by a series of microscopic slides. A report of a case, by Dr. Malloch, of hydatid disease of the liver was also read.

Dr. R. H. Preston, M.P.P., Newboro', presented a patient suffering from disease of bones of ankles, and several cases were reported by members present.

The following officers were elected for the ensuing year :— President, Dr. Cranston, Arnprior ; First Vice-President, Dr. Preston, M.P.P., Newboro' ; Second Vice-President, Dr. Horsey, Ottawa ; Treasurer, Dr. Hill, Ottawa ; Secretary, Dr. Small, Ottawa.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

A Physiological Check to Population.— If we consider special cases of noted men, the great generals of the world, the commanding statesmen, the distinguished scientists, the celebrated authors,—all, in fact, who have become distinguished for superior mental ability—an almost universal result appears : they have either left no descendants, or their families were very small. And, for that matter, we need but to look at the evidences everywhere surrounding us. We think it will be found to be a general rule that persons constantly exercised in mental labor have few or no children ; while the largest families belong to those who do not trouble themselves to think at all. There is abundant reason to believe, then, that such a physiological check to population really exists ; and, in its operation, it is not difficult to perceive a rich promise for the future of the human race. For it is in no sense, in its superior phase, a starvation check. Nor does it need any of the violent repression of natural desires exercised in the prudential check. At first sight, it appears as if its tendency must be to constantly place the cultured at a disadvantage in numbers as compared with the dull and ignorant. But this disadvantage is more than

counterbalanced by the progress of education and the brain-incitements of modern civilization. Thus, the class of brain-workers is being continually recruited, despite its lack of fecundity, and we can see indications of an immense future augmentation of this class of the population at the expense of the unthinking, and consequently of a new barrier to the progress of population, whose efficacy is now but beginning to appear.—*From "The Problem of Population," by Charles Morris, in Popular Science Monthly for September.*

Letters of Advice:

FROM A COUNTRY PRACTITIONER TO HIS SON, WHO HAS JUST ENTERED AT A LONDON HOSPITAL.

* * * I hope you are comfortable in your lodgings. I daresay you will be rather lonely at first, after the merry life you have been having down here. There is no place so lonely as a large city when one is without friends. I remember when I went, as a young man, to Paris, to walk the French hospitals, I was for a time abjectly miserable until I found friends. After that the whole aspect of things underwent a change, and I had a time which I look back upon as the happiest of my life. But do not make friendships prematurely. The acquaintances that are most ready to hand are just those which are least desirable, and which you may find it most difficult to shake off if they prove uncongenial. Be sure of this, that the friendships which are best worth making are, like most other good things in this world, only gained through merit and patience. The best of your fellow-students, and especially those of older standing than yourself, will wait to see what kind of a man you are and how you demean yourself, before proffering you their acquaintanceship. If they see you about with rowdies and idlers, they will conclude that you are a bird of the same feather—a conclusion which I am sure you do not wish them to form—and you will find that you have acquired a reputation that it may take months to break down. Therefore beware of these "old man of the sea" acquaintanceships.

As to your studies, you will get better advice from your lecturers than I can give you, for the whole plan of medical edu-

cation has undergone a complete change since I was a student. We had to shift for ourselves and to help ourselves much more than the modern medical student. But do not rely too much on your teachers, and do not be satisfied with the minimum that they require of you. That is necessarily regulated according to the average, or even the less than average, mind; and I think I may say, without making you conceited, that you will find your abilities as superior to those of the ordinary run of your fellow-students, as you will find them inferior to those of the few picked men amongst them. After your long vegetation down here you will probably discover that your powers of memory and concentration are out of training, and that prolonged reading is a weariness to the flesh. Do not be disheartened at this, and do not above all things imitate those inexperienced Swiss tourists, who on the day after their arrival start off on expeditions which are only within the powers of trained muscles; otherwise you may find yourself laid up, metaphorically, with blistered feet and aching muscles. Have patience rather; mind and memory will soon get into training if you begin with short spells of study and lengthen them gradually. A few words as to the art of reading. Never read in an easy chair; if you find your thoughts persistently wandering after making honest efforts to chain them to your book, give up reading for the time; after you have finished your chapter or your subject, shut the book and see how much of it you remember, turning again to the book to repair all gaps in your memory. After each lecture read up the subject in your text-book with the help of your notes. Never let your reading be slovenly, with the notion of first getting a general idea, and filling in the details on a second reading. That is a thriftless mode of work. Try also to ask in respect to everything you read *Cui bono?* Remember that whatever you learn has a practical application. The proximate object of course is the satisfaction of your future examiners, but there is a remote object too, and by ferreting this out as well as you can in your present ignorance of later studies, you will increase those links of association which the memory needs, if it is not to be overburdened. Let your memory concern itself with facts, and not words and tables.

Each fact that you read is linked with others by innumerable hidden ties, the discovery and appreciation of which make study fruitful and easy. I could find much more to say to you, but this is I think sufficient pabulum for your mind for the present.

FROM A PROSPEROUS YOUNG SPECIALIST TO HIS BROTHER, WHO DESIRES TO FOLLOW IN HIS FOOTSTEPS.

* * * I will say nothing to discourage you. It is fruitless to fight against destiny, when, as usual, it takes the form of inherited warp of nerve-cell. Strange that we should both throw back to the first baronet after two generations of soldiers, barristers, and other idlers. But while I myself say nothing to divert you from your purpose, pray let not my prosperity too much encourage you. Act as far as you can as though I and my doings had no existence. It may seem arrogant in me to warn you not to expect my good fortune, but I will do more, I will counsel and urge you to turn away from it should it offer. Sometimes I can find it in me to envy those of my contemporaries who, as the saying goes, are eating out their hearts waiting for practice that never comes. In my better moments it seems to me that eating out one's heart like that is a hundred times better than eating out one's brains as I am doing. I wonder whether anyone but the successful specialist himself ever realises the utter weariness that he often feels at spending his life in a small and monotonous field, too worn by the dull round of work to have either the time or the energy to wander into that open campaign of pure research, which is so much more varied and pleasant, if so much less remunerative. Some men can do both, but they are blessed with exceptional physique and power of work. I for my part cannot even find the inclination to work out the scientific result of my personal observations. Ten years ago, as you know, I looked forward to a long period of idle time in which I would follow my bent and give myself up to the study of science without being disturbed by the importunities of private patients. But in what I am often tempted to regard as an evil hour I took another path, and ever since have had to neglect that higher calling no less than my own scientific culture. Let this picture, written though it be perhaps in a dark

moment, deter you from following that acquisitive bent which is common to all, and stifling that special, rare and precious bent towards research which I once had, and which I am glad to think is germinating also in you. Mind, all this is no argument against specialism—it only tells against specialism over-driven. And do not think that we specialists are alone, or indeed in chief, to blame. No, it is the public who make specialism and specialists what they are. Do you think it does not gall me when men in our profession write bitter things about specialism? It galls me all the more because I know them to be partly true. But we cannot help ourselves, we are the slaves of the public, and must do their bidding. From such slavery I beg you to keep free..

FROM A SECOND-YEAR'S STUDENT TO HIS FRIEND, A FRESHMAN.

I meant to have been up in town on the 1st to do the honors of the hospital to you, but a wretched sprained ankle has laid me by the heels, and I shall not be able to put in an appearance for another week. I was going to give no end of good advice. First-year's men, fresh from the country, as a rule do heaps of silly things, simply because they have no one by their side to say "Don't." They come up brim full of enthusiasm and the best intentions, and put on a pace which it is utterly impossible to keep up. They do everything to excess. They not only read too much, but they eat too much, smoke too much, and some of them drink too much. Before they came up they were probably out from morning to night playing cricket and tennis, and the consequence of the sudden change is, that before a month is over they knock up, with a spotty face, a brain that refuses to work, and a mouth that can neither smoke nor eat. Don't you do any of these stupid things. Mind and get a run for an hour every day, if only to keep in training till the foot-ball fairly begins. And don't read too much. You will find that three-quarters of the men who begin with a spurt drop off before a month is over. It is the steady, dogged two or three hours a day, week after week, that breaks the back of the first-year's subjects. Don't rush off at once and buy a new set of bones, and a spick and span dissecting box, and a surgical

pocket-case, and all the books that the lecturers advise you to read. I can tell you where to pick them up cheap by the time you want them ; and besides, I have always found that the men who start by investing in these fineries are the first to get rid of them and the last to use them. Then don't take elaborate notes of the lectures, and waste half your day in copying them out. There are not more than two or three of our men who are worth that amount of trouble. I can't imagine why they make us sit hour after hour in a stuffy lecture-room, when one can read the whole thing through in half the time at home. The use of a lecture, I take it, lies in what a man shows, not in what he says, and if you are scribbling for your life you miss half of it. Then don't waste your time in making pretty diagrams with colored chalks, as you will find many of your fellow students doing. It is a babyish make-believe of work. A rough ten minutes' drawing will serve yonr purpose quite as well as an elaborate work of art. I can't think of any more advice at present, for it is not quite in my line, and I daresay you would not take it if I gave it. Remember, if you want to be liked by the men, you must not get set down as being either a baby or a rough.—*London Medical Times.*

Gangrene of Lung—Drainage—Recovery.—Cayley and Gould (*Med. Times & Gazette*, May 31.) A girl, 12 years old, who four years previously had scarlet fever followed by otorrhœa, now had an acute abscess over the left mastoid process, and extensive denudation of bone about the external auditory process. The abscess was opened and some soft necrosed bone removed. In ten days she had pyæmia, followed in five days by pleurisy and signs of consolidation at base of right lung. Eleven days afterward there were signs and symptoms of a cavity with gangrenous contents. Mr. Gould, at a point where there was "bubbling crepitation," introduced a large trocar and canula, and through the latter a large drain-tube. Fætid pus and gangrenous lung-tissue were passed through the tube. At the end of forty days the patient was discharged cured.—*Archives of Pediatrics.*

CANADA

Medical and Surgical Journal.

MONTREAL, OCTOBER, 1884.

THE CARE OF THE INSANE.

We present to our readers this month an important document concerning the care of the insane in this Province. We make no doubt that it will be read with interest, owing to the high reputation of its author. Dr. Hack Tuke is well-known both in Europe and America as a gentleman of the highest attainments in the department of psychology, which science he has enriched by some of the most valued contributions of modern times. But, besides being an author of high culture and wide attainments, Dr. Tuke has, during a long lifetime, devoted much of his energy towards practically forwarding the interests of that greatly afflicted class of human beings—the insane. The chief means by which, in recent years, the system of care for the insane has been improved and advanced, are, firstly, the almost complete (in some asylums complete) renunciation of the old-fashioned treatment by restraint; and, secondly, the systematic employment of such gentle measures and moral management as have been found of inestimable value in cases of mental disorder. These principles are fully recognized as the only true ones to be acted upon by those who are to be considered competent to manage a lunatic asylum at the present day. Dr. Tuke, being attracted to Canada by the meeting of the British Association, availed himself of the opportunity to visit all the asylums in this Province and in Ontario. His large and varied experience of these institutions throughout Great Britain and the various countries of Europe led him at once to observe the grave defects existing in the management of our local establishments. He was astonished to find that the great reformation in the practical

treatment of these unfortunates, so happily carried forward during the past fifty years and more, has had no effect in benefitting the condition of the insane poor of the Province of Quebec. He was surprised to find, at this day, all the paraphernalia of restraint freely in use at Longue Pointe, just as though the needlessness and the harmfulness of these antiquated mistakes had not been long ago demonstrated. He could not but contrast the condition of our asylums with those in Ontario, of which he speaks in the highest terms. "I am perfectly certain that if it "were possible to transfer the worst patients now in the asylum "at Montreal to these institutions, they would be freed from their "galling fetters and restraint-chairs. They would quit their cells "also, and, in many instances, be usefully occupied where they "are now restrained, with the result that in not a few cases per-"fect recovery to health would follow." Can anyone who has the slightest knowledge of the subject doubt that Dr. Tuke gives the right answer to the question, Why should this be? when he says: The farming system is the cause. The farming system is founded on an entirely wrong principle. That system must be done away with, if ever you expect to see a proper and enlightened plan of asylum management inaugurated in your midst. There is no other conceivable means by which the necessary changes can be brought about. There is no such thing in the world as an asylum conducted according to modern ideas of what an asylum should be, except under the direct control of the government itself. No body of men in the country should be so directly interested in this question as medical men, and we call upon all those of this Province to think of this matter, and to ask themselves whether, in the face of such a state of things as is "so inadequately" described by Dr. Tuke, he is doing his duty to himself and to the society in which he lives, if he do not use what influence he may have to assist in inducing our Local Government to reconsider their action in this matter, and remove from us the reproach of being so far—so very far—behind our sister Province of Ontario in this very important respect.

This JOURNAL has already, on several occasions, drawn attention to the defective condition of the Longue Pointe Asylum as

regards restraint, want of classification, and especially the absence of that thorough and competent medical management which it is so clearly the duty of the Government to provide. These remarks of ours, though commented on by some of the daily papers, failed to produce any effect. We could only feel that, in writing as we did, we had performed a public duty from which we could not, with a knowledge of the facts, abstain. Recent events, in the shape of judicial proceedings instituted for the release of a patient in the Asylum, have brought these defects in the medical department more clearly than ever before the public. It was found by the medical men called to investigate the case that no clinical record whatever was forthcoming. Beyond the name, age, date of admission, character of mental disorder and a few other particulars of that nature, there existed no record of any kind of the phases of the patient's symptoms, the treatment she had had, the number of times restraint had been employed—in fact nothing. The physician of the Asylum—an employé of the proprietors—declared that he believed this woman to have been sane for two years, and yet was obliged to admit that he had never made an official report to this effect to the government inspecting medical officer! Is it to be wondered at that Dr. Tuke suggests that, to secure efficiency, it is necessary to have a competent, resident medical superintendent.

In connection with the account given by Dr. Tuke, the Blue-book recently received makes very curious reading. The Sister Superioress, in her report to the Provincial Secretary, embodies a great number of testimonials from various persons as to the excellent management of the Asylum. It is not presumed to state that any of these is an expert, or has any practical knowledge of asylum requirements. But we are left to infer that French noblemen and our own members of Parliament must necessarily be persons whose opinions carry weight. Thus the most fulsome praise is bestowed upon the establishment by the Baron de Charette, the Comte de Rochefoucauld and the Duc de Morny. Sir Hector Langevin also ventures the assertions that "it is impossible to visit an establishment better kept than this one," and "this establishment is an honor to the country," etc.

Now, we submit that, in place of bald statements of this kind, it would be better if the report could furnish us with data showing the amount of restraint used, the provision made for the outdoor exercise of patients, the special occupations provided for the quieter inmates, the diligence used in preserving accurate clinical records and numberless other points which will readily suggest themselves.

We are certain that public opinion, with those facts on record, will not fail to support any member who will honestly and manfully attack the root of this evil—the contract system—and will vigorously work for its destruction. Not till then can we hope to see the beneficent operations of modern science at work in our midst.

PROFESSOR OSLER.

It has been for some time known that Prof. Wm. Osler of McGill University has been a candidate for the Professorship of Clinical Medicine in the University of Pennsylvania at Philadelphia. On the 7th inst., a meeting of the Board of Trustees of this Institution was held, and it was immediately afterwards announced to Dr. Osler that he had been unanimously elected. We congratulate most heartily our *confrère* and hitherto colleague upon this mark of the high esteem in which his professional abilities are held by the teaching men of the United States. The position he now holds he never sought. It was, in fact, offered to him, without any solicitation on his part. The selection, in our opinion, does his University infinite credit, as showing that they are willing to go even beyond the boundaries of their own country to find the best man to fill such important vacancies.

The profession of this city and of this country feel that they are sustaining a great loss in thus parting with one of their ablest, most zealous and energetic members. McGill University feels keenly the removal of one of its best teachers—and the General Hospital one of the most active members of its staff.

We feel certain that Dr. Osler will be often heard of in his new and wider field of labor, where we wish him all the success and prosperity his undoubted merits deserve.

THE PROVINCIAL MEDICAL BOARD.

The semi-annual meeting of the Board of Governors of the College of Physicians and Surgeons of the Province of Quebec was held at Quebec on the 24th September.

There were present Dr. C. E. Lemieux, President; Hon. Dr. Ross and Dr. Hingston, Vice-Presidents; Drs. Belleau and F. W. Campbell, Secretaries; Dr. L. Larue, Registrar, and Dr. E. P. Lachapelle, Treasurer. Also Dr. the Hon. Theodore Robitaille, Lieutenant-Governor; Drs. D. A. Hart, Bedford; Rich. Kennedy, Geo. Ross and T. A. Rodger, Montreal; Thos. LaRue, Compton; N. H. Ladouceur, Sorel; Fred. Paré, Sherbrooke; Chas. Gingras, St. Sauveur, Quebec; R. P. Howard and J. L. Leprohon, Montreal; W. Marsden, Quebec; L. D. Lafontaine, St. Edouard de Napierville; P. E. Mignault, Acton Vale; Jos. Lanctot, St. Henri des Tanneries; Malcolm Guay, St. Romuald; L. B. Durocher, Montreal; Jules Prevost, St. Jérôme de Terrebonne; Côme Rinfret, Ste. Croix; A. Lamarche, Montreal; P. E. Grandbois, Rivière du Loup (en bas); Alf. Jackson, Quebec; Jos. Marmette, St. Thomas de Montmagny; C. S. Parke, E. A. de St. George, H. Russell, Quebec; A. F. Dame, Rivière du Loup (en haut); I. T. E. Rousseau, St. Casimir, Portneuf.

The minutes of the last meeting were read and confirmed.

The President announced that, since the last meeting, the medical profession had lost one of its oldest and most respected members, viz., Dr. Landry. After some words of warm eulogy of the deceased member,

It was moved by Dr. Guay, seconded by Dr. Belleau, and resolved—"That the College of Physicians and Surgeons of the Province of Quebec has learned with profound regret the death of Dr. Jean Etienne Landry, formerly Secretary, and also President, of the Board, and a member of the Board during a great many years, and that a copy of this resolution be presented to the family of the late Dr. Landry."

The reports of the assessors of Laval University (Quebec and Montreal) and of McGill University were then read and adopted on motion.

The report of the examiners for the preliminary examination for the study of medicine was read and accepted.

Of 34 candidates, 19 were admitted. The names of the successful are as follows:—A. E. Orr, Js. R. Clouston, Théotime Couture, Howard D. Kemp, F. X. Feiltault, Adrien

Gravel, Raymond Benoit, Arthur Lavoie, H. J. Hopkins, J. E. Laberge, Horace Chartier, J. E. Poliquin, John P. Mount, Egide Gingras, J. G. Aubry, Michel Lefebvre, Sosthène Lefrançois, Alex. D. Stewart, Horace Thèriault.

The Treasurer then read his report, including the period from the 1st July, 1883, to the 15th September, 1884. According to this report there have been received $5,322.62. After paying all expenses, there remains a balance of cash in bank of $1,579.07.

Dr. Lachapelle stated that the balance was being continually diminished, and suggested that means should be taken either to increase the income or lessen the expenditure.

Moved by Dr. Hingston, seconded by Dr. Lachapelle, and resolved—"That a committee, composed of Drs. Lachapelle, Leprohon, Durocher, Geo. Ross and Kennedy, be named to examine carefully into the present financial condition of the Board, preparing a detailed statement of the expenses during the past year and a condensed comparative statement for the past five years, and to make suggestions to improve the existing condition of things. That the report of this committee be printed and circulated amongst the members of the Board at least 15 days before the next meeting."

The report of M. de Lamirande, the detective agent of the Board, was next submitted. It went to show that actions had been instituted against the following charlatans and irregular practitioners, viz. :—Pierre Dion, St. Césaire ; Gabriel Courchène (two actions), de la Baie, Yamaska ; Théodore T. Witcher (two actions), Beebe Plain, Stanstead ; F. X. Destremps, St. Cuthbert ; Eugène Ratel, Montreal ; Wm. MacDermott, Weedon. These cases are all pending before the Courts.

At the afternoon session, Drs. Kennedy, Belleau, Lachapelle and L. LaRue were named a committee on credentials.

Dr. R. P. Howard presented the report of the committee named to consider the accusations made by Dr. Lachapelle against the professors of Victoria University. The report concluded by the following resolution, which had been unanimously adopted :—

"Attendu que le Dr. Lachapelle, examiné aujourd'hui comme témoin, refuse au comité les informations nécessaires pour l'aider dans ses investigations ; attendu que tous les professeurs de l'Ecole que l'on peut considérer impliqués dans le *Star* du 10 avril dernier, ont nié formellement avoir fourni des questions aux élèves, soit directement soit indirectement ; il est déclaré que le Dr. Lachapelle a refusé au comité les informations

nécessaires pour l'aider dans ses investigations, et qu'il n'y a pas lieu de procéder davantage sur les accusations portées par la Dr. Lachapelle."

Moved by Dr. Lanctot, seconded by Dr. Durocher, "That the report be adopted."

Moved, in amendment, by Dr. Marsden, seconded by Dr. Lamarche, "That the consideration of the report be postponed until the next meeting."

The amendment was sustained by 22 against 11, and the main motion was negatived upon the same division.

Notice of motion was then given by Drs. LaRue and Belleau as follows:—"That, at the next session of the Provincial Parliament, a petition be presented praying for an amendment to clause 3, chapter iv., of the statutes and by-laws of the College of Physicians and Surgeons of the Province of Quebec; and that the words 'without examination' be replaced by the following words, viz., 'after examination,' the said examination to be upon the following subjects:—Medicine, Surgical Anatomy, Descriptive Anatomy, Surgery, Obstetrics and Materia Medica."

Notice of motion was given by Dr. Marsden, seconded by Dr. Howard, to the effect that the statutes be amended as to the clauses governing the issue of licenses to the bearers of diplomas during the period embraced between the sessions of the Board.

The following gentlemen, having been sworn, received the license of the College:—

Laval University, Quebec.—Patrick Coote, Quebec; Marie Rosaire George Matte, Quebec; Elzéar Pelletier, Rivière du Loup (en bas); Eugène Larue, Quebec; Etienne Gosselin, Quebec; Joseph Arthur Milette, Agnès, Lake Megantic; Alfred Morin, St. Paul de Chester; Frédéric Stanislas Caron, Quebec.

Laval University, Montreal—Ernest Duval, St. Jean Port Joli; Charles Narcisse Valin, St. Hilaire, County of Rouville; M. T. Brennan.

Victoria Uuiversity—Odilon Berthiaume, St. Simon de Bagot; Fréd. H. Daigneault, St. Joachim de Shefford; Wilbrod Fournier, St. François Rivière du Sud; Hector Leduc, Ste. Monique, Nicolet; Jean Oscar Albert Beaupré, Malone, N.Y.; Hormisdas Gauthier, St. Eustache; Roderic Mignault, Acton Vale; Alfred Richard, St. Paschal, Kamouraska; Hector Brosseau, L'Acadie, County of St. John.

McGill University—J. O. Stewart, Andrew Stewart, C. E. Cameron.

University of Edinburgh—James Alexander Hutchison, Benjamin Franklin, W. Hurdman.

Votes of thanks were passed to the authorities of the Laval University for the free use of their halls, and to the Richelieu & Ontario Navigation Company for having kindly granted members reduced fares.

The meeting then adjourned at 4 p.m.

CANADA MEDICAL ASSOCIATION.

Our contemporary, the *Canadian Practitioner*, is responsible for the following:—

"The meeting held in Montreal, August 25th, 26th and 27th, was a grand success in all respects. * * * The unbounded hospitality exhibited by the profession of Montreal was a matter of universal comment. * * * * The banquet given at the Windsor Hotel on Tuesday evening was in all respects simply magnificent," &c., &c.

Many thanks, kind *Practitioner*. Our well-known modesty would not have permitted us to say such nice things of ourselves, and, besides, we are conscious that in some respects you have given us credit for more than we deserve. The meeting was undoubtedly well-timed. The members of the Association were afforded an opportunity of meeting on friendly terms a score or more of the most eminent members of the profession in Great Britain. In fact, almost every department in medicine was represented. These gentlemen came ostensibly to attend the meeting of the British Association, held this year in Montreal, but in the case of a few, at any rate, we have every reason to believe that our meeting constituted the chief attraction. Mr. Lawson Tait of Birmingham came prepared to read a paper on "Abdominal Surgery," his pet subject, and was, of course, doubly welcome. His address (*vide* last number of this JOURNAL) was altogether a great treat. We had intended criticising some of his statements and conclusions, because we are far from being in accord with him on many points, but our space will not permit it at present. At the dinner we were honored with the presence, among others, of Professor Struthers of Aberdeen, who made a very favorable impression in speaking to the toast of the British Association. He is best known for his researches in comparative anatomy, but has been identified for years with the progress of medical education in Great Britain, and is at present a member of the Medical Council. He has for years taken an active part in the Biological section of the British Association.

Although the number of medical men attending this meeting

of the Canada Medical Association was perhaps greater than at any previous gathering, it was a disappointment to the profession in Montreal that more had not availed themselves of the opportunity of visiting our city, considering the additional inducement offered of attending the meetings of the British Association. It has been hinted that our Ontario brethren are disposed to desert the mother association for their new-born local one, but we are loath to give credence to any such rumor. Certainly some sections of that Province are always well represented at the general gathering, and we hope and believe they will continue to be so. We cannot let this opportunity pass without adding our testimony to the able and efficient manner in which the President, our esteemed friend Dr. Sullivan, conducted the proceedings. His address will no doubt have been read with considerable interest.

—Our contemporary, the *Medical News* of Philadelphia, publishes in its issue of September 27th a lecture by Mr. Lawson Tait, delivered at the Jefferson Medical College Hospital. The subject was, as a matter of course, that which Mr. Tait has made so peculiarly his own—abdominal section. Mr. Tait, as is well known, is strongly opposed to tapping. He said that no woman with abdominal disease, unless clearly malignant, should be tapped, and that for five or six years he had not lost a case of ovariotomy which had not been previously tapped. He advocated early operation—ovariotomy as soon as the tumor is recognized. He emphasized the well known fact that incomplete operations are most deadly things to the patient. "You must not begin the operation for the removal of an abdominal tumor unless you are going to finish it. If a part of the mass is removed, and it is then found impossible to complete the operation, the chances are seventy out of a hundred that the patient will die." Mr. Tait believes that it is in deciding this point that experience tells. "Do not begin unless you are confident that you can complete the operation. If you have the courage of your convictions, and the experience necessary to do a difficult piece of work, go ahead and finish it. The chances of recovery will be infinitely greater than it you leave the thing half done." Mr. Tait also spoke of his operation for removal of the uterine appendages, strongly advocating it in suitable cases. He disposed of the objection that the operation leads to certain changes—such as masculine appearance, and others purely theoretical—by saying that, although he had done a great many such operations, he had never seen any change except one of improvement of the health of the woman, which, however, does not always come immediately, as she has usually

to pass through a climacteric period with its miseries. He alluded to an occasional trouble after all sorts of abdominal operations,—acute melancholia—and took occasion to mention his vast experience for so young a man—under forty—of 960 abdominal sections. In this number he had met with seven cases of acute melancholia. The occurrence of acute melancholia in the proportion of, say, one per cent. of such operations does not prove to us that there is any necessary connection. Mr. Tait, although in this lecture he discussed the operative treatment of uterine myoma, did not any more clearly define the position he takes than in previous deliverances.

—We learn that Dr. D. L. Philip of Brantford has been nominated by the Brant Medical Association a candidate for the Ontario Medical Council, to represent the Erie and Niagara Division. From what we know of the high standing of Dr. Philip, his many sterling qualities, and the interest he has always taken in all matters of general interest to the profession, we feel satified he would make an excellent representative and a useful member of the Council.

—On the eve of his departure for Philadelphia, Dr. Osler was made the recipient of a complimentary dinner from his medical brethren in this city. About fifty members were present, and the chair was taken by Dr. R. P. Howard. The kindliest feeling prevailed ; the highest compliments were paid to the guest of the evening, whilst all united in offering good wishes in the new career which was opened out before him.

McGill Medical Faculty.—The fifty-second session of this Faculty was opened on the 1st October with an introductory lecture by Prof. Penhallow, treating of the relative position which the teaching of botany holds in the various schools in this country and the United States. As to the prospects for the session, it may be mentioned that up to the present time over seventy new students have registered, and the total number of the class exceeds that of any previous year.

Medico-Chirurgical Society. —At the annual meeting of the Medico-Chirurgical Society, held on the 10th inst., the following officers were elected : President, Dr. Roddick ; 1st Vice-President, Dr. Alloway ; 2nd Vice-President, Dr. Trenholme ; Treasurer, Dr. Molson ; Secretary, Dr. Gurd ; Librarian, Dr. Reed. Council—Drs. Geo. Ross, Kennedy and Rodger. Publication Committee—Drs. Cameron, Geo. Ross, Kennedy and Bell. The retiring President, Dr. Rodger, in his address, spoke of the

great loss which the Society had sustained in parting with so active a worker as Dr. Osler. Dr. Osler was unanimously elected an honorary life member.

Medical Items.

Curious Case of Poisoning.—Five members of a family residing in Philadelphia were seated at table when one of them produced a pill-box containing some small granules, of which he had been directed to take one before each meal. They were thought to be homœopathic globules, so, by way of joke, the box was passed round and they each took several. In a very short time they were all seized with unmistakeable signs of strychnia poisoning, and one of their number died in three hours. It was subsequently ascertained that each one contained gr. $\frac{1}{20}$, and the fatal dose was supposed to have been about one-half grain.

—"What will they do with it?" must have been the cry that rose to many a pair of lips when their owners heard that the Royal College of Surgeons had been remembered in Sir Erasmus Wilson's will to the extent of £180,000. The College has never received a bequest anywhere near approaching to this magnificent legacy. The largest donation it had previously received was that of £5,000, bestowed on it by the same generous benefactor, who has now placed it beyond the faintest danger of bankruptcy.— *Med. Times.*

—Dr. J. K. Bauduy, Professor of Nervous and Mental Diseases, Missouri Medical College, says: "After a thorough and continued trial of Bromidia at St. Vincent's Asylum, I can cheerfully certify to its great therapeutic value and purity. *Its effects are much more rapid and efficient than the ordinary chloral mixtures.* The sisters in charge of the wards, after using the Bromidia and comparing its effects with the ordinary chloral mixtures used so long as a hypnotic, claim great superiority for the former. Its success has been tested where the other, in similar doses, has failed. The purity of the chloral and the extracts of cannabis indica and the hyoscyamus which it contains, together with the small dose of the remedy which is required, make it almost invaluable to medical practitioners, *who are guaranteed a pure and efficacious remedy in the use of* Bromidia."

CANADA

MEDICAL & SURGICAL JOURNAL

NOVEMBER, 1884.

Original Communications.

ON SOME OF THE VARIETIES OF DYSPNŒA MET WITH IN BRIGHT'S DISEASE.

By R. P. HOWARD, M.D., L.R.C.S.E.,
Professor of Theory and Practice of Medicine, and Dean of the Medical Faculty, McGill University.

(*Read before the Canada Medical Association, at Montreal, August*, 1884.)

Gentlemen,—In selecting this subject as one not unworthy of the consideration of the members of the Association, I am influenced chiefly by its practical importance to medical men, and partly by the comparatively slight attention it has received from English authors. You will not expect a history of the subject at this time ; nor will it be necessary to prove to those listening to me the curt treatment it has received from our English-speaking colleagues in Europe and America.

In speaking of *some* of the varieties of dyspnœa met with in Bright's disease, I will simply mention and dismiss without further consideration that common variety observed in both parenchymatous and interstitial nephritis which is largely referable to organic affections of the respiratory organs, such as bronchitis, hydrothorax, pulmonary œdema, etc. This variety is not apt to be overlooked when the cause of the dyspnœa is investigated, although even in it the respiratory disturbance is probably not due solely to the structural lesions revealed by the physical signs. This paper will rather be confined to some of those varieties of dyspnœa and disturbed respiration met with in Bright's disease not dependent upon discoverable disease of the lungs, pleura, or heart ; and in describing them, I will do so in a clinical way

in connection with some of the cases in which they were observed by myself. And first of a case of *chronic interstitial nephritis*, in which the early and distressing symptom demanding attention was a *continued dyspnœa.*

On the 17th December, 1874, Mr. A. consulted me on account of chilliness, pain across the lumbo-sacral region, and *distressed breathing*, with sense of tightness in the chest during any exertion—symptoms which he attributed to exposure to cold upon a boat a few weeks before. Aged about 50, he had always been a very healthy man, much exposed to the vicissitudes of the weather, as the active manager of a line of forwarding boats. "Exploration of the chest detects no signs of disease in lungs or pleura. Heart's sounds free from murmur; impulse strong; apex beat a finger's-breadth inside nipple line. Radial pulse resisting; feels like the vas deferens—smooth, not beaded; 90 in minute. Eyelids slightly puffy. No pitting of ankles." Of late, contrary to his habit, has risen nightly two or three times to micturate. Urine abundant; pale, free from deposit; specific gravity, 1008; contains about one-tenth its volume of albumen. A subsequent examination discovered very few fragments of granular casts.

The case impressed me very much at the time, because of the *early appearance and prominence of the dyspnœa*, unexplained by the state of the lungs or heart, and fairly referable, in my opinion, to chronic interstitial nephritis, as indicated by the coexistence of the dyspnœa with albuminuria, great tension of the radials, and signs of a strong left ventricle. Headache soon became an additional symptom, subsequently general dropsy supervened in spite of removal to the sunny south, and death followed in July, 1875. No autopsy was permitted.

This may be fairly regarded as an instance in which *dyspnœa* occurred as an *early and prominent* symptom of chronic Bright's disease, and as an example of the cases to which M. Hervier, in 1877, was perhaps the first to draw attention under the title "De la Dyspnée Urémique comme symptôme primitif de la Nephrité latente."* The dyspnœa of Bright's disease may also

* *Thésé de Paris*, 1877.

present the *interrupted* character of spasmodic asthma. Both forms may co-exist, as in the following case, and what is more important, clinically, the paroxysmal, like the continuous dyspnœa, may be the early distressing symptom of an unsuspected renal affection.

W. K., aged 49, was sent to me by my able friend Dr. Gun of Durham, Co. Grey, on the 7th July, 1870, on account of *paroxysms of asthma*, which resisted treatment and *alternated with a continuous dyspnœa.* A temperate man, he never had been ill until two years before calling on me. At that time he had bronchitis, which relapsed, the entire illness lasting about three months. It was about the end of this indisposition that he first experienced habitual dyspnœa, with, at times, paroxysms like those of spasmodic asthma, a disease not unknown in the patient's family. An examination of the chest gave the following facts: Normal respiration everywhere; expiration not prolonged; absence of adventitious sounds; limits of lung normal; no local bulging. Cardiac sounds free from murmur; the first shorter than natural; superficial cardiac dulness slightly extended, and the impulse increased in force. Heart's action rapid, tumultuous, and occasionally irregular. Urine abundant, about six pints in 24 hours; contains a moderate amount of albumen. No œdema of lids or ankles. Seven months later Dr. Gun reported as follows: "Œdema has appeared in legs; urine still abundant, and contains more albumen; respiration has become 'generally easy,' but occasional *paroxysms* of *severe dyspnœa* continue to recur." He died two months later, and during the last few weeks his uræmic sleepiness was frequently disturbed by dyspnœa.

The following case, sent me in June last (1884), is a striking illustration of severe dyspnœa on the slightest exertion as *the* symptom which compelled the patient to seek advice under the supposition, shared in by her attendant, a man of much experience, that she had disease of the heart, while it was really a case of chronic interstitial nephritis, with the sequential cardiac hypertrophy of that affection. In this instance, the severe attacks of dyspnœa were accompanied by paroxysms very like those of angina pectoris.

Mrs. —, aged 57 years, mother of a large family, had always enjoyed excellent health until her grand climacteric period, when she experienced her first attack of arthritis in the ball of the right great toe. Similar attacks have continued to recur every couple of months, chiefly in the same articulation of either foot, and once in an ankle and one knee, until a year since, when they ceased, leaving some moderate enlargement of the first metatarso-phalangeal articulation. It was about the cessation of the above attacks of arthritis, which, by the way, are relieved by colchicum, that she first experienced any shortness of breathing; it has continued to be felt ever since upon the slightest exertion, even when walking a few yards. Some days dyspnœa is not much felt, and her breathing is usually better in the morning than later. The *severest* attacks of dyspnœa are accompanied by a pain starting from under the lower angle of scapula forward to the sternum, and down the front of right arm to the elbow. The dyspnœa and the angina will rapidly subside if she sits down. She is stout, healthy-looking, and not particularly pale. No puffiness of lids or ankles; no pitting along the tibiæ. Examination of lungs reveals no disease. Cardiac impulse strong; apex beat in nipple line, and very distinctly felt; sounds loud and devoid of murmur. No soufflet up aorta or pulmonary artery, and no sign of intra-thoracic tumor. Pulse 84, of increased tension and fair volume—is often at times irregular. She gets up once every night to micturate. Urine of the afternoon contained albumen—say, one-tenth its volume—and some medium and large light granular casts.

In this case, the co-existence of the signs of hypertrophy of the left ventricle, with albuminuria and a history of chronic gout, point so decidedly to the probable existence of the "contracted gouty kidney," that I assume that to be the correct diagnosis, and believe that the dyspnœa may be more reasonably referred to impairment of the renal functions than to latent degeneration of the cardiac substance—either fatty or fibroid—either of which condition of the heart would account for the angina-like attacks.

Another variety of dyspnœa or disturbed respiration occasionally met with in Bright's disease is that known as the *Cheyne-*

Stokes respiration—first described by the former in 1818, and by the latter at a subsequent date.

At the meeting of this Association held in Hamilton in 1881, on the occasion of an interesting paper upon a case of Cheyne-Stokes Respiration, read by Dr. Zimmerman, I related a typical instance of that kind of dyspnœa which had occurred in one of my puerperal patients, the subject of uræmic eclampsia and coma ; and to me there appears no reason against its occurrence in the other acute forms of Bright's disease, when the renal functions are gravely impaired—in scarlatinal nephritis, for example. But I quite recently met with a case of *chronic* Bright's disease, in which the peculiar form of dyspnœa in question was not only *unaccompanied by coma*, but was an abiding symptom from day to day.

In February last, 1884, my old friend Dr. Jones of Prescott summoned me to see a case of chronic Bright's disease, the main features of which were as follows :—M. A., aged 52 years, had been for about a year obliged to get up at night to micturate, and had done so more frequently of late ; for about same time has experienced some dyspnœa when walking. Six or eight weeks before my visit the dyspnœa increased and assumed the peculiar rhythmic character known as the Cheyne-Stokes respiration. Morning vomiting of mucus had existed a few weeks, and œdema of the legs for ten days. Several examinations of the urine had failed to find albumen, until the day of my visiting him, when it existed in considerable amount, and a few hyaline and light granular casts were also visible with the aid of the microscrope. The radial pulse was tense ; the heart's impulse strong, with a peculiar double beat ; the apex impinged half-an-inch inside the nipple line. The breathing during the examination and throughout my visit presented the following characters : Each inspiration became shorter and feebler until it could not be perceived ; a total arrest of respiration for a few seconds ensued, and then inspiration returned, at first feebly and slowly, but grew progressively deeper and stronger until it became unduly exaggerated ; and this rhythm persisted.

It was a matter of much interest to me to recognize what may

be called *chronic* Cheyne-Stokes dyspnœa in a patient walking about his house and the subject of Bright's disease. As a general rule perhaps, this peculiar dyspnœa, when observed in this connection, indicates the approach of death within a few days; in this man, however, it had already lasted six or eight weeks, and the end did not appear imminent. A few years ago I noted, with my colleague and friend Dr. Osler, carefully, and for the first time, the presence of Cheyne-Stokes breathing at intervals during two or three weeks. It occurred in an aged man gradually succumbing to what appeared to be general failure of the bodily functions consequent upon advanced age. It was unattended by coma for a week or two, although for a few days before death stupor obtained. Puzzled at the time to account for the persisting Cheyne-Stokes respiration, there being no reason for suspecting any organic disease of the brain or heart, I am now inclined to attribute it to failure of the renal functions, and I would suggest the importance of carefully examining the urine in every case in which the peculiar respiration in question is observed; it will probably frequently reveal an unsuspected affection of the kidneys. Indeed I hold that it will be more frequently found to be an evidence of renal disease than of fatty degeneration of the heart (Stokes), or dilatation and inelasticity of the aorta (Hayden)—views respectively held by Stokes and Hayden. And when it is observed in these latter affections, I doubt not that renal inadequacy from associated fibroid kidneys is the actual cause of the peculiar disturbance of the respiration in the majority of them, rather than a morbid condition of the heart's fibre or the aorta's walls.

Respecting the pathogeny of these several forms of dyspnœa observed in Bright's disease it will not be wise to speak at any length, as it would unduly prolong this paper. That the *continuous* dyspnœa and the *paroxysmal* or *asthmatic* forms are of uræmic origin there can be little doubt, and it is highly probable that in chronic Bright's disease the condition of the blood also plays its part in the causation of the persistent shortness of breath sometimes present. The blood globules are not only reduced in number, but their power of absorbing oxygen is much

diminished, and an increased respiratory effort—a dyspnœa—results. The Cheyne-Stokes disturbance of breathing of Bright's disease is probably also a consequence of what is called uræmia.

It is true that Cuffer has produced the Cheyne-Stokes type of breathing readily in dogs by injections of carbonate of ammonia, and less promptly and severely by injections of creatine; and that he regards these principles as the active agents in the production of uræmia. But the explanation of uræmia is not settled; nor is that of Cheyne-Stokes respiration,—and it is no part of my plan to discuss the numerous hypotheses extant regarding them.

Besides these several varieties of dyspnœa observed in Bright's disease, there is yet another of much more rare occurrence, and of which but two examples have presented themselves in my practice.

About 25 years ago a young woman entered the Hospital under my care suffering from acute renal dropsy and urgent dyspnœa, which could not be explained by physical examination of the chest. There was some evidence of laryngeal obstruction, not at all characteristic, when I saw her, and she died rather suddenly before my next visit. At the autopsy, very considerable serous effusion was found in the false vocal cords, the ary-epiglottic folds, and in the posterior aspect of the arytenoid region of the larynx. Apart from these laryngeal conditions, and kidneys exhibiting the early stages of acute parenchymatous nephritis, there was nothing found in the cadaver to account for the fatal dyspnœa. Neither coma nor convulsions had preceded death.

It was not till fifteen or more years after the preceding case that a second one of severe *laryngeal* dyspnœa in Bright's disease crossed my path. The subject of it, a man of about 36, had been about a week ill with ordinary scarlatinal dropsy. His children were still passing through that contagious disease. Suddenly he experienced some difficulty of breathing, which steadily increased. An examination of the chest revealed nothing capable of accounting for the decided and progressive dyspnœa. On the other hand, there were signs of laryngeal

obstruction—viz., depression of the base of chest and episternal pit during inspiration; sense of obstruction in the larynx, with feebleness of voice: weak respiratory murmur in lower parts of lungs, unattended by dulness on percussion, etc. On the second day these symptoms had become so urgent that, in consultation with Dr. Drake, it was agreed to perform tracheotomy at once. The introduction of the tube gave instant relief to the dyspnœa, and so far confirmed the correctness of the diagnosis.

I have never met with laryngeal dyspnœa in chronic interstitial nephritis, and its rarity in the parenchymatous form is proved by the few examples of it mentioned in the monographs upon Bright's disease. In this paper I have endeavored to illustrate the following points:—

1st, That marked dyspnœa may occur in Bright's disease not due to gross lesions in the lungs, pleura or heart,—such as inflammation or œdema of the lungs, hydrothorax, or pleurisy with effusion, endo- or pericarditis, or valvular disease.

2nd, That it may be a continuous dyspnœa, or of paroxysmal character, resembling ordinary spasmodic asthma; and that these types may occur in the same case, although, in my experience, the continued variety is more frequent than the asthmatic.

3rd, That these forms of dyspnœa may occur as the prominent symptoms of renal disease, and their origin may escape recognition if the urine be not carefully examined, as well as the heart and pulse.

4th, That Cheyne-Stokes respiration is often a symptom of Bright's disease, and that it obtains in both acute parenchymatous and in chronic interstitial nephritis.

5th, That while usually an evidence that the fatal issue is near at hand, it may occur in a chronic form, and may occur for weeks, perhaps even for years.

6th, That these several forms of dyspnœa just mentioned are very probably due to that defective renal elimination called uræmia.

7th, That in the acute forms of Bright's disease, serious or fatal dyspnœa sometimes, but rarely, occurs in connection with effusion into the submucous membrane of the larynx, so called "œdema glottidis."

A PECULIAR CASE OF CEREBRO-SPINAL FEVER.

By Dr. HARRISON, Selkirk.

(*Read before the Canada Medical Association, at Montreal, August*, 1884.)

Those of you who were present at the meeting of this Association at Toronto in 1882 may remember that I read a paper on a peculiar form of fever that had for some time been rather too common in my locality. You may remember that its peculiarities were: That it came on gradually, after a period of rather indefinite malaise; that the symptoms at the commencement resembled typhoid—headache, pain in the back and limbs, fever of a remittent type, frequently slight epistaxis, slight tenderness of the abdomen, and sometimes slight tympanites. After running for about a week the symptoms would abate, and the patient appear to be on the high road to convalescence, when, just as the attendants were congratulating themselves on the result, they would find him gradually growing worse. The fever returned, and soon became distinctly intermitting, taking either the quotidian or tertian type, defying ordinary doses of quinia, and though very large doses, from 20 to 45 grains in an hour or two, would break up a paroxysm, the patient was no better, and the fever, in from twelve to twenty-four hours, invariably returned. The pupils were widely dilated; the pain in the head became more marked, and extended down the spine; the cervical spine became tender, the head drawn back, neuralgic pains in the extremities made the patient scream with agony, the temperature during the paroxysm running from 101° to 105°. The fever would slacken, change its type from quotidian to tertian, or *vice versâ*, leave, so that the attendants would think the patient safe; again return, perhaps after the patient had seemed to be getting well for five or six days, until, after running a course of from ten to sixteen weeks, in the fatal cases (which were from half to two-thirds of those attacked), the patient, emaciated to a skeleton, with head drawn back and the ham-string muscles contracted until the heels were drawn up to the buttocks, pupils dilated until the iris was a mere ring, died from pure exhaustion.

During the last two years I have seen, in my own practice

and the practice of a couple of my friends, some six or seven cases, all presenting more or less of these characters. The last of these I saw first in the practice of my friend, Dr. Sherk of Cheapside, on the 4th of April last. In this case the patient, a girl of some 12 years, had taken sick the day before at school. Dr. Sherk found her looking very ill, as if she had been sick for a week or two. The next day her skin was covered with a dark-colored eruption of small purple spots, so that the friends thought she was breaking out with small-pox. My friend had very little experience with small-pox, and so sent for me. I found her lying nearly comatose, pupils widely dilated, temperature 104°, pulse 130, skin hot and dry, and she would just arouse enough on speaking sharply to protrude her tongue. The skin was covered with small purple spots; in fact, it presented all the symptoms of a violent case of the purpuric form of cerebro-spinal meningitis, and I expected it to run its course very rapidly. On the eighth day, I called and found our patient up, walking about, and the parents thinking that she was getting well. I told them not to feel too sanguine; that I should not consider her safe until convalescence had lasted for at least a week. In about three days she got worse, the fever returned as an intermittent of the quotidian type, with the characteristic of that type, of coming on some two hours later every day. During the paroxysm, the pupils were widely dilated, the head painful, the neck tender, the stomach irritable, and a remarkable nervous tremor affected the limbs. Even at the time of my first visit there was a marked tremor of the tongue on protruding it. These symptoms continued for some twelve weeks, the fever seldom very violent, sometimes absent for a day or two, sometimes severer, and sometimes very mild. When our patient seemed partly over it, her appetite returned, and though her stomach was weak, she had very little nausea; her mind was clear, she was cheerful and hopeful, and wished to be taken out. Her father took her in a carriage, at first a short distance, then farther, until he drove her to my house, nearly five miles, and for nearly four weeks we were in hopes she would pull through, though she did not gain much in flesh, and had always a good

deal of nervous unsteadiness. About fifteen weeks from the access, and between three and four weeks after the fever had left her, whether from some indiscretion in diet, or the natural effect of the disease, her stomach gave way; she could keep nothing on it. Her appetite was good, but food was very soon rejected. And even when the stomach was kept empty, about once in 24 hours, she would vomit a bilious, glairy mucus. The tremors became universal, affecting all the limbs. She became emaciated to the last degree, and for a couple of weeks before her death, eighteen weeks after seizure, Dr. Sherk tells me every muscle seemed to quiver as if under the influence of a galvanic battery.

The peculiar feature of this case was its sudden accession, the marked cerebro-spinal nature of the disease, and after so marked and violent an accession, its sudden subsidence and change of type to the chronic peculiar form of the disease I have been familiar with for some twelve or fourteen years. At the time this girl was taken, Dr. Sherk had a patient within less than half a mile that he had been treating for some six weeks for typhoid fever, and it was not until I described the ordinary course of this fever that he suspected its nature, though before the patient's death, and I think during the thirteenth week, its cerebro-spinal nature became manifest.

ON INFANT FEEDING.

By A. D. BLACKADER, B.A., M.D., M.R.C.S.
Instructor in Diseases of Children, McGill University.

(*Read before the Medico-Chirurgical Society of Montreal, Sept. 26th*, 1884.)

The question of infant feeding—how best to supply nourishment to infants deprived of their natural and best food, mother's milk—is continually coming before us for solution; and only slowly, through much theory and an infinite amount of trial, too often unsuccessful, are we groping our way to a successful answer.

During the past few years much study has been given to it, especially in Germany and America. Germany has had its special conference on the matter, which, after proclaiming the very

sensible fact that art could not, and they did not intend to try to improve on nature, set itself to inquire after some substitute in those cases where the mother's milk was wanting, and all the members agreed that some modification of cow's milk, to the complete exclusion of all the mercantile preparations, offered the best solution to the difficulty. Paris, too, has had its conference, but with little practical results. In America, before several of the prominent associations, during the past two years, Jacobi, Lewis Smith, Meigs and Leeds have lectured—men whose thoughts on the matter express a life study— and yet to-day I venture to say, if a number of medical men were asked to give their instructions as to the artificial feeding of an infant, the directions would be almost as various as the number of members present.

My object in asking your attention to it to-day is not for the statement of any dogmatic facts, for few at present are in a position to make that, nor with any hope that I myself may add to the general knowledge of the meeting, but rather to direct attention to an important subject often overlooked or neglected, and to suggest a few lines for discussion, in the hope that from the results of one another's experience we may each gain more light and perhaps harmonize our views where conflicting.

At the outset, we desire to recognize the fact that what one child may thrive on another may starve on; and while in this fact we see apparent idiosyncrasies, yet below it we would recognize as more powerful than idiosyncrasy, the tonic and stimulating effects on the digestive and nervous system of the infant of good fresh air, plenty of sunlight, and cleanliness. But it is a matter of everyday observation that most infants, if they have a good supply of mother's milk, thrive with even a comparatively moderate amount of these stimulants. To have a perfect artificial food, one that may be really a substitute for mother's milk, we should have one adapted not merely to the strong and well-circumstanced. Such is not an adequate test. The stomach of a strong lad may digest green apples without the faintest symptom of a colic, yet we would hesitate to add them on that account to our list of available children's foods.

No, the proper test is the delicate infant's stomach. If it is digested with comfort in that, we may be sure it will be in that of the stronger infant, and that both will thrive and the stronger infant be the stronger, because his stomach is not ordered to do heavy work.

Now, granted that good normal mother's milk is our standard, we would note, first, the very imperfect knowledge we have of its exact constituents. In the results published of even our best authorities, there is a wide divergence of the quantities of the several classes of constituents; and of the exact components, that are grouped under the heading of albuminoids and fats, our knowledge is very limited. I have placed before you the results of some of the later researches, those of Leeds, and König, quoted by him:—

WOMAN'S MILK.

	Mean.		Minimum.		Maximum.	
	Leeds.	Konig.	Leeds.	Konig.	Leeds.	Konig.
Water	86.76	87.09	83.34	83.69	89.99	90.90
Fat	4.01	3.90	2.11	1.71	6.89	7.60
Milk Sugar	7.00	6.04	5.40	4.11	7.92	7.80
Albuminoids	2.06	3.88	.85	1.14	4.86	8.50
Ash	.21	.49	.13	.14	.35	?

COW'S MILK.

Water	87.70	87.41	80.32	91.50
Fat	3.75	3.66	1.15	7.09
Milk Sugar	4.42	4.92	3.20	5.67
Albumen	3.42	4.52	2.76	12.44
Ash	.64	.70	.50	.87

We notice, on comparing these two tables, no very great divergence between the two milks: a good deal of variation in the albuminoids and fat; much constancy in the amount of milk sugar; and yet, supposing the albuminoids and fats and salts represent the same substances in both, not so much difference but that one might be substituted for the other without great harm resulting. But just there our knowledge is at fault, and just there our difficulty comes in, for, practically, we find that the two milks present entirely different results on the addition of coagulating acids—cow's milk, when so treated, yielding up four-fifths of its albuminoids as a rapidly-forming and firm coagulum, very slowly dissolved by the gastric juice; while human milk yields hardly one-fourth of its albuminoids in the form of a

slowly-forming and flaky coagulum, easily acted on by the ferments of the stomach, the remaining three-fourths remaining uncoagulated. Herein lies the difficulty, and one cannot but view with some apprehension the directions of a very eminent board in this city, issued last summer in a circular addressed to mother's, recommending pure, undiluted cow's milk for infants deprived of the breast. On what does this difference in these albuminoids consist? Lehmann thinks there is little difference in the albumens but what may be caused by the more or less alkaline state of the fluid. He says —" I have found woman's milk, when acid, yield a much thicker coagulum than when alkaline; and cow's milk, when alkaline, a much looser coagulum than when acid—facts which are of the greatest interest and value in relation to dietetics." But Beidert goes further, and insists on a much more radical difference in the caseins. My experience would say he was right, but perhaps some of our physiological chemists present may speak more authoritatively than myself on the matter. But besides this difference in the albumens, which must rank as the most important, we note also that cow's milk contains considerably less sugar of milk and a little less fat, so that when diluted this deficiency becomes very notable.

With these facts before us, we reach the question—How can we best alter cow's milk to assimilate it in all its important properties to mother's milk? Two ways have been proposed, both of which I have been trying with variable success at my dispensary. The first is the chemical or digestive method; the second is the mechanical. By the first, recognizing that the important difference between cow's milk and human milk lies in the different reactions of the albumens, this ingredient is partially or entirely peptonized, and thus prevented from forming these hard and indigestible coagula. Some preparations of pancreatin, with the addition of an alkali to the milk, is probably the best method of accomplishing this. Lewis Smith of New York gives this plan his cordial endorsement in an address delivered last spring. Keating of Philadelphia speaks more guardedly, but still recommends it, both referring to the Extractum Pancreatis of Fairchild Bros. & Foster.

I have notes of fourteen cases in which I used this preparation during the past three months. Of these, ten were cases of entero-colitis, and four of mal-nutrition simply. In two of those suffering from mal-nutrition, marked improvement took place; in the other two it was abandoned after a ten days' trial—in one case for Mellins' food, in the other for food prepared according to the formula given below. The ages of these infants were from three to seven months. Of the ten cases of entero-colitis, four were much improved—the motions, which had been curdy and undigested, became more homogenous-looking, and shortly regained their natural color; five I have marked not benefited—in two of these the diarrhœa seemed rather increased under its use; and the tenth case, which had presented slight cerebral symptoms before its use, died shortly afterwards in convulsions. The preparation used in all these cases was the Extractum Pancreatis. Theoretically this method seems almost perfect, and it was a matter of much regret to find one's expectations unfulfilled. My cases are too few in number, however, to draw any absolute conclusions from them. With the mechanical method of altering the albumen of cow's milk to render it more digestible, all of you are familiar, and I need say little. It came to us many years ago, with the emphatic recommendation of the late Dr. Meigs, in his well-known formula of a weak solution of gelatine and arrowroot added to the milk, with the further addition of a little sugar and cream. It was slightly altered by Jacobi, who substituted barley and oatmeal for the gelatine and arrowroot, and with him it still remains a favorite formula. Still later, its value has been theoretically proven by Leeds in a series of experiments, in which he effected the coagulation of the albumen in the presence of several attendants.

Dr. Arthur V. Meigs has lately insisted that in this dilution of milk the albuminoids should not exceed one per cent., which, he asserts, is all that human milk contains. He further asserts that the directions generally given to increase the strength of the dilution as the child gets older is a mistake, for human milk twelve months after delivery is very little altered from what it was at the end of the first month.

Though the albuminoid constituents in cow's milk form the chief difficulty in its assimilation by the child's stomach, the amount of the other constituents in the milk should not be overlooked, or the infant's nutrition will surely suffer. And as nature insists on keeping the sugar supply a constant quantity, it will be inadvisable on our part to let it fail. In our directions, cane sugar is generally ordered; but it may well be doubted whether it is wise that it should be so, and where practicable, sugar of milk should be directed. To increase the quantity of the fats, which are also deficient, cream may be used in place of a portion of the milk; and the whole fluid should be kept strictly alkaline by the addition of either lime-water, soda or potash. With regard to this mechanical method, I would ask an expression of opinion on the following:—

On the amount of dilution.
On the best practical diluent.
On the relative values of cane and grape sugar.
On a good working formula.

My own in use at the dispensary is as follows:—

Three tablespoonfuls of fresh milk, not boiled.
One tablespoonful of cream.
Two tablespoonfuls of lime water.
Four tablespoonfuls of barley water or thin gruel.
One teaspoonful of sugar of milk, and a minute quantity of salt.

The question here arises, can we not obtain the same results without trouble by ordering some of the many proprietary preparations, especially such as may be termed milk foods? The fact that they are proprietary, and, therefore, secret preparations, that analyses by many able chemists in the States have given very variable and not altogether flattering results, that they are liable to be old and musty, and that they are very expensive for the poorer classes, should, I think, make us resort to them with great caution. Of the milk foods, Nestlé's and Gerbers' are probably most used. Of those prepared from Liebig's formula, Mellin's is undoubtedly the best; and I have occasionally prescribed it with good results.

We all know that the feeding of starchy preparations to very

young infants is to be avoided, on account of their slight capacity of digesting it, and its liability to undergo fermentation in the intestines. That occasionally some do thrive in spite of our predictions to the contrary is probably also an acknowledged fact by us all, and must be explained by some unusual precocity of development of the pancreatic and intestinal glands in such children.

Another point that should, it seems to me, be kept prominently before the mother in feeding an infant is the amount of food it should be allowed to have. Biedert has published some very interesting facts in a long article entitled "Weight Studies." In this he gives the conclusions arrived at from the systematic weighing of infants, as to how much food a child should have to thrive on; and asserts that a bottle-fed infant thrives best when the minimum amount of food necessary for development is given to it. His studies were principally directed as to how much such required. His weighing showed that an infant of one month, 6–7½ lbs. weight, requires only 5½ to 6½ ozs. of cow's milk during the 24 hours; second month, 8 lbs. weight, 10–22 ozs. In the third month, 3 ozs. for every kilogramme the child weighs. This, I think, is very much below what is usually given. The principal conclusions Biedert has arrived at are as follows:—

1, Remarkably small amounts of nourishment, especially in the first few weeks, are sufficient for the good development of infants.

2, An increase in the amount of fat considerably above what is contained in dilute cow's milk spares albumen, makes digestion easier, and increases growth of child.

3, Sickly children must be fed with weaker preparations of milk, such as are suitable for infants of younger weeks.

4, Careful regulation is necessary, as the child has no instinct which guards against indigestible or over-feeding. In the first months, this regulation is of importance. Even breast-fed children are apt to drink too much then.

One other point on which I would make a very few remarks, since cow's milk is taken so generally as a basis for infant food. Are there any circumstances which affect it deleteriously, and,

if so, what are they ? Routh, in his admirable work on infant feeding, quotes Dr. Meyer's experiments in Berlin to prove that almost invariably the milk of stall-fed cows is acid, in some cases very acid, even when quite fresh. The deleterious effect of ill-cleaned stalls on the udders of the cows is also well known.

A good many people in this city keep cows, and sell the milk to their neighbors around. Such milk must almost invariably be acid ; and even if good and fresh in other respects, must require the addition of some alkali. Under all circumstances, care should be taken as to the feeding of these cows. Lately, also, a Dr. Brush of New York, who has given this matter a good deal of attention, claims that in cows, where the activity of the mammary gland is continued from parturition to parturition, through heat and pregnancy, and this through countless generations, the gland has become a secretory organ ; and says that food which in other animals might cause a diarrhœa, in cows seldom produces this effect, but appears rather to stimulate the milk secretion, to the manifest detriment of its quality. He thus states the conditions which alter the wholesomeness of milk :—

1st, *Feeding.*—The sudden change from the dry food of winter to the free flush of grass, eating brewer's grains, poisonous weeds, decaying fruit and vegetables, and drinking poisonous, stagnant water.

2nd, *Genital Excitement.*—The milk is affected when the cow takes the bull. He says he has found from his own observation that the milk following the act is always decidedly acid, and in subsequent pregnancy, there can be no doubt that the nutritious quality of the milk is lowered. Again, a cow in heat may often worry and excite a whole herd. He once had the milk of such a one kept separate, and fed to a child in the neighborhood. The result was that the child was taken violently ill with vomiting and purging, which only ceased on the suspension of the milk.

3rd, *Different diseases to which the cow is subject.*—He mentions a case of traumatic garget (a common disease which disappears with little or no treatment), where the milk from an affected part of the gland for a number of days was stringy,

lumpy and pus like, but alkaline, while that from the other quarters was normal in appearance, but decidedly acid. Four days after the commencement of this condition he fed one of his children with some of the milk, with the effect of producing violent stomach-ache and purging.

There can be no doubt that great care should be taken in the feeding and management of cows whose milk is to be used for infant-feeding; and that all dairies, and all places where cows are kept, should be placed under frequent and thorough government inspection. It has for some time been a question with me, whether the milk of the large number of goats in the lower parts of the city could not be more utilized for feeding infants. Routh strongly recommends it; its freshness could alway be relied on, and much less than that of cows is it liable to be affected with the weather, with changes of food, or with disease.

FUMIGATIONS OF GAS-COAL-TAR IN DIPHTHERIA AND CROUP.

By GEO. W. MAJOR, B.A., M.D.,

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The May number of the *Annales de l'Oreille, du Larynx*, &c., contains a short account of a communication presented to the Academy of Medicine at Paris in March last by Dr. Delthil, of Nogent-sur-Marne (Seine) on the specific properties of fumigations of gas-coal-tar (*goudron de gaz*) in diphtheria and croup. Dr. Delthil's researches extend over a period of eight years, during which he used a variety of hydrocarbons capable of absorption into the system through the respiratory organs. Turpentine he found particularly efficient. The readiness with which its vapors are received into the body and excreted by the kidneys is a familiar fact, as evidenced in the instance of house painters. The various substances employed were all capable, in a greater or less degree, of destruction of germs, and their use was based on that property. The remedies, as a class, appeared to mate-

rially lessen the tendency to laryngeal developments. As the result of his experiments, a combination composed of gas-coal tar 200 grammes and turpentine 60 grammes was selected as the most efficient. This mixture is to be used as a fumigation, being first ignited. The combustion of this compound evolves volatile hydrocarbons and empyreumatic principles which are capable of undergoing pulmonary absorption without danger and without provoking the slightest irritation or tendency to cough. The author of the original communication claims that the formula recommended is particularly assimilable, and acts the part of a microbicide in the economy. He reports five cases of diphtheria treated by this method exclusively, with perfect success. Two of the cases were of a very severe type, necessitating tracheotomy, and ended in recovery.

Since the publication of his first report, Dr. Delthil announces in the *Deutsche Med. Zeitung* that he has used the fumigations in four additional cases of tracheotomy for laryngeal diphtheria, with one recovery. Dr. Féréol reports its use in one adult, with recovery. This gives us ten cases, with seven recoveries; in six of these cases, tracheotomy was performed, with three recoveries.

The amount of evidence offered is quite inadequate to found for this method the claim of being a *specific*, and it is only by recording the experience of a number of independent observers that any accurate estimate of the value of this treatment will ever be arrived at. This consideration has induced me to note six recent cases of diphtheria and croup, with a few observations on the means of employing, and the action of the drug, as seen in the several subjects.

Case I—*June 26th.*—Wm. H., æt. 9, a well-nourished boy, with a well-developed membranous exudation on the pharynx, tonsils, velum and pillars. The previous month a younger child had suffered from diphtheria, and was, at the above date, under my care for paralysis of the soft palate. The treatment adopted was the hourly administration of full doses of chlorate of potash and tincture of the muriate of iron, associated with free alcoholic stimulants, demanded by a very

feeble and rapid pulse. The fumigations were administered every four hours, and were freely inhaled by the little patient without the slightest discomfort. The relief to breathing was very decided, and free expectoration followed each exposure. The membrane ceased spreading and rapidly disintegrated. By the fifth day the throat was entirely free from exudation.

Cases II and III.—T. H. B. and M. D., aged respectively 3 years and 1 year, were seen August 10th, with catarrhal croup. There was much swelling, but no membrane was visible. Fumigations were ordered, with other treatment appropriate to the cases. The fumigations afforded such prompt relief that those in charge neglected the administration of any additional remedy. Expectoration became free, a watery discharge of the nasal mucous membrane was set up, and the improved breathing was very gratifying indeed. Complete convalescence took place in forty-eight hours.

Case IV.—Ralph D., a strong boy of 3 years—taken suddenly ill with vomiting, high temperature, &c., on the morning of Sept. 23rd—was first visited by me Sept. 25th, 6 p.m. The fauces were occupied by a glistening greenish membrane. The vital powers were much depressed. Pulse 150, very feeble, and altogether an unpromising case. Treatment by iron and chlorate every hour; brandy, one dessert-spoonful every half hour until the odor became perceptible on the breath, when the interval was to be increased to one hour; fumigations every fourth hour. At noon on the 26th, the membrane had lost its green and shiny look, and had become of a dull and opaque appearance. After pushing the remedies for forty-eight hours, obstinate vomiting occurred, which necessitated the withholding of all internal administration for eight or ten hours. The fumigations were, however, persevered with. The remedies were again resumed at greater intervals. No fresh development had taken place, and though the prostration was extreme, calling for the stimulant in increasing quantity and at shorter intervals, the membrane was seen to have crumbled away appreciably. After each fumigation, expectoration

was freely induced, a flow of mucus from the nose occurred, an abundance of pale, limpid urine was voided, and sleep of a quiet, restful character supervened, lasting during the entire process. The two nurses in charge also remarked the action of the fumes on themselves, as increasing the renal discharge.

Case V.—W. S., a delicate-looking lad of 7 years, was first seen on the morning of the 25th September. Of much milder type than the last. The exudation was of the wash-leather order, and occupied the pharyngeal wall and tonsils. Pulse 140. Had been taken ill on the morning of the previous day. The usual internal treatment was adopted, with fumigations every four hours. The child so fully appreciated the relief afforded by the latter, that no persuasion was necessary to induce him to freely inhale the fumes. The improvement was steadily maintained, and on the 29th the fumigations were suspended, as all membrane had vanished. The pulse sensibly diminished in frequency, and increased in volume and strength under the judicious use of brandy.

Case VI.—M. McE., a little girl of 4 years, complained of a sore throat and feeling ill on the morning of September 27th. The first visit was made at mid-day on the 28th. Membrane was found on uvula and tonsils. No fever, pulse 140, and weak, glandular swelling very marked. The usual internal remedies and fumigations every four hours were prescribed. When seen the same evening, six hours after commencing the treatment, the membrane had visibly increased, but there was no constitutional change for the worse. She expressed herself as relieved by the fumigations, which latter induced a peaceful slumber. On October 2nd, the membrane had disappeared altogether, and the glandular enlargement had almost entirely subsided.

From the foregoing limited experience of the gas-coal-tar treatment as applied to diphtheria and croup, I do not find myself in a position to speak decisively of it as a *specific;* if for no other reason than that I associated with it a treatment that, on the average (when pushed heroically, and, especially if conjoined with the free administration of stimulants), has yielded

me good results. This much, however, I am prepared to say, that at a reasonable time after the commencement of fumigations the membrane not only ceased spreading in each instance (a happy issue not always seen after the best directed means heretofore employed), but also in 24 hours showed signs of disintegration, for it literally crumbles and does not exfoliate, as under other conditions. The congestion of the adjacent parts was sensibly lessened, pain and swelling were quickly diminished, expectoration was rendered free, and though the fumes were as thick as midnight, they were freely inhaled without producing the slightest tendency to cough or other discomfort. The nasal secretion was increased, the action of the kidneys stimulated, and the odor of violets was quite appreciable in the urine. Sleep was induced, and continued for hours if undisturbed.

As to prophylaxis—a not unimportant feature where diphtheria is concerned—in no instance did any contagion occur. The property of tar as a disinfectant has been long known; its use in the navy dates very far back; vessels were purified by lowering into the hold a bucket containing it, into which a few links of chain at red heat had been dropped.

The success of a method of treatment, based as this is, on the absorption of the fumes by the air tract, must largely depend upon the thoroughness with which all details are carried out. The frequency of the application, the quantity of material employed, and the length of time of each exposure, must be regulated by the gravity of each case and the urgency of any special symptom. The danger of fire must be reduced to a minimum by enclosing the vessel containing the burning fluid in one of larger area, and by withdrawing all inflammable material to a safe distance. The caution to avoid adding to the burning compound any fresh material should be unnecessary. At each sitting, from 4 to 8 ounces should be used, and from 7 to 12 minutes will be required for its combustion. The apartment, the door of which should be closed and further protected by being shut on a sheet, will remain filled with the fumes for four hours at least. The introduction of a metal cylinder, with metal tubing attached, to be used as a respirator, would be a great

boon, and rob the remedy of its one great objection. I refer to the grimy appearance of the patient and his surroundings, a feature insignificant in itself, if further experience should demonstrate the efficacy of the method.

Post-scriptum.

Case VII.—By far the most remarkable instance of the effects of the gas-coal-tar treatment occurred in the case of an infant of 13 months. The first indication of constitutional disturbance was perceived on Sept. 28th, and the illness was ushered in with fever and vomiting. On the morning of the third day pronounced hoarseness and difficult breathing became prominent symptoms. The physician in attendance attributed the condition to teething and cold, and adopted a line of treatment in accordance with his views. On the morning of the seventh day of the illness (the fifth after the development of laryngeal symptoms) my services were called into request. The child was found with a very frequent and feeble pulse, no elevation of temperature, and breathing of a very distressing and stridulous character. The upper throat, on examination, showed no swelling, little or no congestion, and no signs of exudation. A forcible examination of the larynx, however, displayed a well-developed and evenly-distributed membrane lining that cavity. The case was declared to be of a very serious nature, and the treatment so highly lauded by Delthil, in laryngeal complication, was recommended to be followed. A small room was selected for the carrying out of the fumigations; these were to be repeated every third hour, and four ounces of the compound was to be consumed on each occasion. The child was to be exposed for 45 minutes continuously to the action of the vapor. On the following day I made my second visit, and found that eight fumigations had been administered, making in all six hours of active exposure, with no apparent benefit to the child. Supra-sternal and supra-clavicular depression was marked, and altogether the case presented a very hopeless prospect. Tracheotomy was suggested, and the chances of success or failure fairly explained, but was declined. The fumigations were not continued, and no

other treatment substituted. On the following day I returned by appointment to make a *post-mortem* examination of the laryngeal condition (fully expecting a fatal issue), but was most agreeably surprised to find the child not only alive, but showing marked improvement in breathing. It appears that shortly after the abandonment of the fumigations the child coughed up a quantity of disintegrated membrane, and improvement steadily advanced. The fumigations were now renewed at intervals of four hours, with exposures of from 20 to 30 minutes. The bronchial congestion suggested mild expectorants, which were accordingly ordered. Brandy in teaspoonful doses every hour in addition, with milk and beef-tea for nourishment. On the following day (the tenth of the illness and the eighth of laryngeal signs) the improvement was very marked indeed. The fumigations had been faithfully applied, and the child, though extremely weak, was taking the brandy and liquid nourishment freely and was disposed to play. The voice and cough were still croupy, the breathing at intervals slightly labored, but sleep had been frequently indulged in, and had lasted for an hour at a time. A good recovery resulted, with some paresis of the soft palate.

This last case, the only one of diphtheria treated solely by fumigation, was of a very severe type. The following observations on the action of the drug were made: No cough was produced by the dense smoke; the urine, though very thick immediately previous to the commencement of fumigation, cleared rapidly and became pale, limpid, and larger in amount; the odor of "violets" was also noted; the evacuations from the bowels lost their offensive smell, became free and of a black and tarry consistence. During the fumigations the breathing, even at the critical period, seemed more free and deep, and the expectoration was rendered more easy and abundant; a gentle slumber followed each exposure.

The history of this case vindicates in a peculiarly timely manner the good opinions advanced for this treatment by its originator, and cannot but inspire, with some confidence of success, the further trial of this method.

Case VIII.—W. S., a younger brother of case V, was first seen Oct. 9th. The child had been unwell for a day or two previously, and on the evening of the 8th complained of some pain in swallowing. At 9 A.M. on the following day he was seized with a *fit*, lasting upwards of an hour, and at the time of my visit (three hours later) he was quite dazed and apathetic. On examination of the throat, a well-defined and evenly-distributed membrane was observed. Fumigations were ordered every four hours, with continuous exposure. The usual internal remedies and free stimulation were also conjoined. Daily improvement was perceptible. The membrane steadily diminished, as also did the glandular swelling, which latter was considerable. By the fourth day, recovery had so far advanced that the fumigations were desisted from, and a speedy convalescence ensued. As perfect isolation had been insisted upon during the illness of the first child, the second development may fairly be ascribed rather to exposure to a common source of infection than to direct contagion.

Case IX.—The last case I here record, though not a successful one, illustrates the influence of the gas-coal-tar treatment in laryngeal diphtheria, accordingly I am persuaded to append a concise report:—

A delicate child of 13 years, with, I believe, some heart complication, and but recently recovered from a severe pneumonia, was first seen by the family physician on the morning of Oct. 18th, when an exudation on both tonsils was discovered. I saw the child in consultation on the night of the 21st, being called in owing to laryngeal obstruction. The breathing was very much embarrassed. On laryngoscopic examination, an exudation of the *mildew* type was found to line the larynx and trachea. The pulse was small, very frequent, and feeble. The usual internal treatment was followed, as also free stimulation. The condition was altogether desperate. Fumigations were ordered every second hour, the child to be continuously exposed. The increase of laryngeal exudation was apparently controlled by this treatment, as also, indeed, was the development in the upper throat, which latter showed signs of

disintegration. The feeble constitution, however, succumbed to the intensity of the poison, 34 hours after the commencement of the fumigations, by cardiac failure, the result of the depressing action of the virus on the nerve centres. In this fatal case, there were not any signs of deficient oxygenation, notwithstanding the fact that the diaphragm, in its *open and shut* movements, resembled rather the action of a valve in mechanics than a muscle of the human frame.

At the suggestion of the writer, an apparatus has been prepared for the use of this compound, which, to a great extent, overcomes the objection that otherwise would prevail against its adoption. It consists of a rectangular box of galvanized iron of about 18 inches by 2 feet in dimensions; a door opens on one side to admit of the introduction of a metal vessel containing the compound to be consumed; at a distance of an inch from its lower border, numerous small openings are made, to facilitate perfect combustion, by the free entrance of air. After combustion is complete, these orifices may be closed by small traps provided for the purpose, and attached above by rivets, which permit of free revolution, and thus prevent the escape of the fumes into the apartment. A tube 2 inches in diameter, of the same metal, emerges from one side, near the top, for about 12 inches; this latter is provided with a damper much the same as that in use in the ordinary stove-pipe, which may be used either to shut off the vapors altogether or to regulate the amount required for inhaling. The apparatus is further completed by the attachment of a piece of duck-hose fitted over the metal pipe, and supplied with a mouth and nose piece of padded leather, somewhat similar to an æther inhaler. Rubber tubing will not answer the purpose, as it is readily acted upon by the fumes. The whole cost of the apparatus is about three dollars.

QUARTERLY RETROSPECT OF OBSTETRICS AND GYNÆCOLOGY.

Prepared by WILLIAM GARDNER, M.D.,

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Since my last report, the period of greatest activity in gynæcological circles has come and gone. The British Medical Association and the International Medical Congress, each with an obstetrical and gynæcological section, and the American Gynæcological Association, have held their meetings. It is impossible, and perhaps undesirable, within the limits of a report on the progress of obstetrics and gynæcology intended mainly for general practitioners, to present any adequate or complete idea of the work being done in this department of medicine and surgery. I offer a resumé of the more important papers.

INTERNATIONAL MEDICAL CONGRESS—SECTION OBSTETRICS AND GYNÆCOLOGY.

Howitz of Copenhagen read a paper on *The Diagnostic Difficulties in cases of Hypertrophy of the Cerviz Uteri.* When the supra-vaginal part of the cervix is elongated, the uterine diaphragm is moved upwards, the internal os is above the brim of the pelvis, and the body of the uterus is completely within the abdominal cavity. If now the uterine body be expanded by a tumor or pregnancy, the diagnosis may become very difficult. The uterine tumor is unusually moveable, and may thus be easily confounded with an ovarian tumor with long pedicle. Moreover, it may be fluctuating, almost undulating, without the existence of hydramnios. The cervix then is hard, the isthmus soft, and then above it is the body of the uterus, soft, fluctuating and moveable. Mistakes are easily made. If the sound is passed, abortion is apt to result. The author reported four cases of this combination of hypertrophy of the cervix, with enlargement of the corpus uteri. Three were pregnancy and one a myoma. In all, the diagnosis was very difficult. Martin of Berlin and Priestley of London agreed with the author as to the difficulties of diagnosis. The practitioner can never be too careful in the

diagnosis of pregnancy. In doubtful cases, he must insist on sufficient time being allowed him before giving a positive opinion.

Koeberlé of Strasburg discussed the *Treatment of Fibromyoma of the Uterus by Laparotomy*. The indications are: 1, Excessive and prolonged bleeding, and rapid and steady growth of the tumor. 2, An age at which the patient is still far removed from the menopause. 3, It is unfavorable if the tumor be situated in the lower zones of the uterus, or between the layers of the broad ligament. 4, It is also indicated when, from a variety of circumstances, the tumor renders life intolerable. He thinks the operation contraindicated when there are extensive vascular adhesions between the tumor and the abdominal wall; when the tumor is impacted in the pelvis; and when ascites, or incurable disease, or diseases which may interfere with the cure, are present.

As regards the method of operation, he makes his incision in the middle line. If it must extend beyond the navel, he excises this. Pediculated tumors are tied singly or in sections, cut off, and the pedicle dropped. Comparatively small differentiated sessile tumors are enucleated and the wound closed by deep concealed sutures. This method, which he has employed since 1878, does not certainly protect against bleeding. The larger tumors can only be removed by partial or total extirpation of the uterus. These latter may be divided into two classes—those in which the tumor reaches only to the level of the internal os and does not extend within the folds of the broad ligament, and those which involve the cervix. Koeberle's usual method in such cases is to isolate the uterus on both sides by ligatures, to throw two ligatures round the cervix, tighten them with serre-nœuds, cut off the uterus and tumor, and then fix the stump in the abdominal wound by needles transfixing it. The author has operated in this way about fifty times. The mortality is about the same as that of ovariotomy, with extra-peritoneal treatment of the pedicle—5 to 10 per cent. It were better to drop the pedicle, but he fears the hæmorrhage which might thus occur undetected. When the tumor is between the layers of the broad ligament, the operation is almost always fatal. In such cases,

removal of the appendages is to be preferred, but is often difficult, sometimes useless, as, for example, when occlusion of the bowel indicates operation. Schröder's operation, tempting as it appears, is too difficult and dangerous, except for rare cases. For the toilette of the peritoneum he uses napkins, not sponges. All raw surfaces are lightly dusted with iodoform, as also the surfaces of the abdominal wound, which is then covered with lint.

Apostoli of Paris read a paper on *The Electrical Treatment of Uterine Myoma*. The author's method differs from former methods, in that the constant current only is employed ; of great intensity, reaching even to 100 milliampères, and the active pole is introduced within the uterus. The positive pole is thus used where bleeding and mucous discharge are the prominent symptoms, and the negative pole when dysmenorrhœa and cellulitis complicate the case. The tumors shrink, although they do not disappear, and the patients are restored to health, as the author has shown in more than a hundred observations.

Wiedow of Freiburg read a paper on *Castration in Uterine Fibro-myoma*. The main object of the paper was to demonstrate the after results of the operation. The principal questions are the effects on bleeding and size of the tumor. He had collected 149 cases. Of these, 17, or 11 per cent., died from the effects of the operation. Only those whose condition was known one year after operation were reported upon. These numbered 49. In 36, menopause and diminution in size of the tumor were noted. In 3, menopause, the condition of the tumor unnoticed. In 8, diminution of the tumor, with slight regular or irregular bleeding. In 1, slight bleeding at intervals of three months, without any account as to the size of the tumor. In 1, slight bleeding at intervals of three months, without notice of the size of the tumor. Of 12 cases in which the tumor extended to the umbilicus or beyond, in 10, menopause with diminution of size of the tumor ; in 1, irregular, slight bleeding, the tumor slightly diminished ; in 1, after a few months menopause, there occurred regular inconsiderable discharge of blood, with lessening in size of the tumor. The author thinks that as a result of those obser-

vations, the large size of the tumor cannot be considered an objection to the operation, and that it is to be preferred to myomotomy, with its mortality of 33 per cent. He would limit myomotomy to fibrocystic tumors and to pediculated subserous growths. The figures he has given show that it is not necessary, as Lawson Tait asserts, te remove the Fallopian tubes. In many of the cases reported, the tubes were left, with the result of menopause and shrinking of the tumor.

During the discussion, Olshausen and Spencer Wells did not agree with Koeberlé in considering impaction of the tumor in the pelvis or ascites as contraindications to operations. These conditions strengthened the indications. Vascular parietal adhesions cannot be diagnosed and are not contraindications. Olshausen considers the greatest difficulties to exist in subserous tumors and myomas of the cervix. When, in a case of subserous development, the base of the tumor cannot be reached, ligatures are first to be applied to all available points. The peritoneum is then incised and the tumor shelled out. This can often be doue without much bleeding. Sometimes one must be content with partial operations, as in ovariotomy. The intra-peritoneal treatment of the pedicle he believed to be that of the future. Drainage he considers objectionable.

Spencer Wells said the contraindications mentioned by Koeberlé and Olshausen were of much less importance when antiseptic precautions were used. An important part of these precautions he believed to be the cleansing of the vagina and plugging with lodoform gauze. He has not used drainage since 1878.

Hegar agreed with Wiedow in the question of castration *versus* myomotomy. The intra-peritoneal treatment of the pedicle, he believed, would be the best if Schröder's method could be trusted for security against bleeding, but this is not the case. The extra-peritoneal method has given the best results.

Knowsley Thornton recognizes only the following as contraindications: Malignancy, important diseases, as nephritis, and enormous size of the tumor, cases in which the woman may be

considered as only an appendage of the tumor. In tumors of the size of a child's head, he prefers castration. In very large tumors, he considers the latter operation very difficult and its utility questionable. Enucleation by the vagina is to be avoided, unless nature have begun the process. The extra-peritoneal treatment of the pedicle with Koeberlé's serre-nœud gives, as yet, the best results. He never uses drainage.

Martin of Berlin considered that these tumors ought to be removed, not only on account of present symptoms, but to anticipate necrosis or degeneration. The operation ought to be completed by bringing the serous membrane over the stump or pedicle and complete closure of the abdominal wound.

Howitz (Copenhagen) is decidedly opposed to too frequent laparotomy in uterine tumors. It is only rarely indicated, and supra-vaginal amputation of the uterus is very dangerous; its mortality is at least 35 per cent. The bleeding usually depends on disease of the endometrium, and it may be frequently obviated by curetting. If this or other intra-uterine treatment fail, then castration may be attempted. Supra-vaginal amputation ought to be reserved for those cases in which rapid growth indicates it, and in which ergot and electricity have failed.

Kaltenbach (Giessen) drew attention to the dangers of extensive thrombosis of pelvic and femoral veins. He believes that the extra-peritoneal method protects best against sepsis and bleeding. He had tried Schröder's method four times, but was obliged ultimately, in two of the cases, to resort to the extra-peritoneal method to arrest hæmorrhage.

Sänger (Leipzic) spoke in favor of the intra-peritoneal method. In four cases he had employed a combination of Schröder's and Olshausen's methods. The elastic ligature should not be drawn too tightly. All recovered, three very smoothly.

Koeberlé replied by saying that the contraindications laid down by him he did not regard as absolute. He never employs drainage.

It will thus be observed that while the majority of the great authorities on this subject agree that the operative treatment of uterine myoma may be greatly extended, there is, perhaps, as

much difference of opinion as a year ago with reference to the details of the methods of operation. It is often the case with the originator of a new procedure that he claims better results than his imitators. So it is with Schröder's myomotomy. A majority of the speakers had to say that they found it uncertain in staying bleeding. The majority, while agreeing as to the value of removal of the appendages in small tumors, asserted that it is a most difficult operation in large tumors, and often is useless in securing arrest of bleeding and shrinking of the tumor. Authorities were nearly equally divided as to whether the intra- or extra-peritoneal method of dealing with the pedicle were the best. It is probable that the majority of authorities at the congress and absent favor the extra-peritoneal method.

Halbertsma of Utrecht read a paper on *Albuminuria Gravidarum*. The author reasserted his well-known opinion long ago promulgated that the albuminuria of pregnancy is essentially due to compression of the ureters. In greater detail his views are: 1, The facts do not bear out the theory that the cause of albuminuria of pregnancy is reflex contraction of the renal arteries. 2, The albuminuria of pregnancy is observed with especial frequency when there is a want of relation between the size of the pregnant uterus and the abdominal cavity. 3, The cause of the albuminuria of pregnant women is most frequently distension and compression of the ureters.

Ingerslev of Copenhagen admitted that compression of the ureters was really the cause of puerperal convulsions in some cases, but it was to him difficult to explain why convulsions were not more frequent. Stadfeldt, 23 years ago, had shown that the ureters, especially the right, are often dilated. And with still greater reserve must the theory of the causation in general, of the nephritis of pregnancy by compression of the ureters be accepted. The newest researches on this subject show how dark is still the pathogenesis and etiology of this disease. The presence of albuminuria with convulsions teaches us little. The frequent chronic course of albuminuria after labor harmonizes but little with the hypothesis of a suddenly removed pressure such as occurs after labor. Moreover, careful examinations of a

large number of pregnant women have not furnished proof that albuminuria gravidarum is especially apt to occur under conditions such as produce pressure, and under which eclampsia often occurs, as, for example, first pregnancy, hydramnios, twin pregnancy, &c.

Halbertsma, in reply, wished emphatically to express the opinion that usually there is no kidney disease, but only compression of the ureters; and, further, that the condition of the kidney is not one of congestion, but anæmia. The remark that, if his explanation were correct, all pregnant women ought to have eclampsia, cannot be borne out. It had also been said that the theory of compression of the ureters is too simple. This is no argument. He believed in the maxim: *Simplex veri sigillum.*

Martin of Berlin read a paper on *The Diagnosis and Treatment of Diseases of the Fallopian Tubes.* This is a subject too little discussed in text-books. It is, however, of great importance. He believed the diagnosis to be not nearly so difficult as generally supposed. The bimanual method of examination, especially with anæsthesia, will usually render possible a careful examination of the tubes, particularly when diseased. In order to be sure that the tubes really are felt, one must trace their connection to the uterus. The treatment must be medical as well as surgical, as extirpation of diseased tubes appears to be very dangerous. While of the last 100 ovariotomies the author had lost only 3; of 18 operations for pyosalpinx 5 had died, of which, at least 4 of sepsis. The results of the medicinal and dietetic treatment were often much better than usually supposed. In many cases he had seen improvement, and in a few, cure even of sterility.

Kaltenbach agreed with the reader of the paper as to the frequency with which the normal tubes can be felt during anæsthesia. When distended they are more easily felt. The closed abdominal end sometimes forming a sac projecting into the abdomen; sometimes it exists as a series of little tumors strung together. An important point in the diagnosis appears to be the occurrence of colicky pains at the site of the tumor—a symptom which can only be produced by a muscular organ.

Sänger of Leipzig emphasized the importance of gonorrhœa with reference to the causation and diagnosis of diseases of the uterine appendages. Noeggerath's views on this subject had not received sufficient attention. He had operated four times for this disease ; all were successful. He thought that extirpation of the uterine appendages was a better name for the operation than salpingotomy.

Hegar presented one of the most important papers in this section of the congress. The subject was, *Castration as a Remedy for Nervous and Psychical Complaints.* The frequency with which the ovaries have been removed in recent years, and for a variety of symptoms, demands the most serious consideration, lest, by reason of defective knowledge or imperfect conception of the object to be attained, women may be mutilated by an operation which certainly carries with it dangers to life. No living gynæcologist is perhaps better fitted, by reason of large experience of the operation, extending over several years, to introduce a discussion before a representative body of gynæcologists such as constituted this section of the congress. The author began by remarking that by castration two objects may be in view. One is the removal of a diseased organ ; the other is the anticipation of the menopause. The first needs no explanation. Of the second, we, however, know very little ; we know, it is true, that menstruation ceases, that the uterus undergoes involution, but of the consequences on the body generally we know very little, so little that from it we can derive no indication for the operation. From what has been said it will follow that such an operation, in the absence of probable anatomical changes in the sexual organs, is not justifiable. In the case of association of sexual disease and a neurosis, the question will arise whether or no the neurosis depends on that organic disease. In this connection great weight has been laid on the site of the neuroses. The so-called lumbar and spinal symptoms, the sacralgia, pain and other abnormal sensations in the abdomen and hypogastrium, external genitals, rectum, hips, thighs, and urinary organs have been held to be due to sexual complaints. But the lumbar portion of the cord may be irritated

by some other part of the nervous centres, or by peripheral irritation, and then secondarily a sexual complaint be set up. It is quite true, however, that very marked evidence of derangement of the lumbar portion of the cord in general indicates affection of the genital apparatus. The chronological relation between the phenomena of the neurosis and the sexual complaint must also be reviewed. The intensity of the nervous affection frequently, however, does not correspond with the extent of the pathological changes in the sexual organs. The sexual disease having excited the neurosis, it does not always follow, although, certainly, it does so occasionally, as in the case of rectification of a flexed uterus, that the neurosis shall thereupon disappear. When, therefore, it has been proved that a causal relation exists between the neurosis and the genital affection, it does not follow that by castration the complaint shall be cured. The author then, in the following manner, formulated what he considers to be the indication for castration in neurosis: A neurosis depending upon a lesion of the genital organs indicates the operation when it (the neurosis) cannot be cured or materially relieved by milder measures, and when life or psychical health is endangered, or when occupation or enjoyment of life is prevented. He has collected the results of his operations for neurosis, restricting his conclusions to those under observation for a long period of time after the operation. They have been very favorable. Unfavorable results were proportionately very few.[1] The causes of the unfavorable results are most important. Most frequently it was some circumscribed inflammation which either existed previously or was a result of the operation. It is to be supposed that the nerves of these nodules of exudation, which usually are at the site of the ovarian pedicle, are irritated, and the irritation is conveyed to the centre, as is the irritation of ovulation. The patients require long watching, as the old neuroses have produced certain changes which can only be removed by time, and the disturbances attendant on menopause are very apt to concentrate themselves on the already affected part of the nervous system. Ill results are sometimes due to the not very rare ventral hernia. In conclusion, the

author pointed out the necessity for the study of neuropathy in connection with gynæcology.

Discussion.—Koeberlé thought that castration for nervous complaints is very rarely indicated. Neuroses depend much more frequently on social conditions, defective education, &c., than sexual complaints. He wished to ask Sir Spencer Wells if he had frequently observed neuroses in patients suffering from ovarian cysts.

Sir Spencer Wells said that it was exceptional to see neuroses in the subjects of ovarian tumor. The majority of his patients had presented no symptoms specially referable to the nervous system. He had four times removed ovarian tumors from insane women. In two of these decided improvement had resulted. In two cases of ovariotomy performed in sane women, insanity supervened. He had not seen any relation between diseases of the nervous system and ovarian diseases. Hysteria in young women proceeds much more frequently from defective education than ovarian disease. To extirpate the ovaries except for decided tenderness or unmistakeable ovarian disease he considered as unjustifiable as to remove the testicles from insane men.

Martineau of Paris believed that primarily a neurosis existed, and that some uterine disease aggravated it. If, then, the metritis were treated, the neurosis either subsided or disappeared.

Olshausen of Halle finds it very difficult in certain cases to decide whether castration is indicated or no, whether the neurosis depends on sexual disease, and whether or not improvement in the symptoms is to be expected from cessation of ovulation. He had operated in four cases for nervous or psychical complaints. In three the effect of the operation was *nil*, although in one case the symptoms seemed specially to depend on menstruation. In the fourth there was no cure, but decided improvement. The speaker thought that the indications for castration in nervous diseases cannot yet be precisely formulated.

Gusserow of Berlin coincided in general with the opinions of Spencer Wells and Olshausen. It is of the greatest importance to know how long after the operation recovery lasts. A tem-

porary improvement in nervous and hysterical complaints may result from any treatment.

Kugelmann's (Hanover) experience is that nervous diseases much more rarely depend on disease of the ovaries than upon anæmia, uterine disease, parametritis, etc.

Gordon (Portland) protested against the idea that the operation must be restricted to cases in which an examination reveals disease of the ovaries. The operation had often been performed because of symptoms, without physical signs, and yet the organs were found to be diseased, as, for instance, cystic degeneration.

Priestley (London) had never yet found the operation to be indicated. The disease is usually situated in the nerve-centres, the sexual symptoms are only local manifestations of this, and the general condition of the patient is often aggravated, rather than improved, by extirpation of the ovaries. The removal of these organs without palpable disease is not permissible. But even when such disease exists, it can in many cases be relieved by suitable medical and moral treatment. In many cases of neurosis, associated with disease of the ovaries, the Weir-Mitchell treatment had done excellent service.

Engelmann (St. Louis) defended the operation against the assaults that had been made against it. When all other remedies have been tried, when the ovaries are diseased and appear to be the centres whence the symptoms proceed, then the operation is justifiable. The fact that large ovarian tumors did not produce nervous symptoms proved nothing. Very often chronic irritation or unimportant pathological change excited violent nervous phenomena.

Knowsley Thornton read a paper on *Early Ovariotomy*. He first discussed the question of tapping. Men like Spencer Wells and Keith are in favor of it; others are opposed. What advantages does tapping present to us? It cures certain cases of cyst of the broad ligament, and a few very much more doubtful cases of ovarian cyst. They very often fill again, and the cysts of the broad ligament often become papillomatous and infect the peritoneum by the unhealed puncture in the cyst or otherwise.

For diagnosis, exploratory incision is not much better. For if the expert operator escape the dangers of tapping, as bleeding, inflammation and sepsis, he cannot prevent the small cells of papilloma escaping and flowing over the peritoneum. It is worthy of remark that Keith, who taps so frequently, complains of the frequency with which cases of successful ovariotomy die subsequently of malignant growths. The author himself, a few years ago, removed a cyst whose inner surface was covered with papilloma. None of the contents escaped within the cavity of the abdomen, but the patient died a few months later of cancer, which did not proceed from the incision, but from the scar of a previous tapping. He had done in all 423 ovariotomies, with 40 deaths, of which 12 were caused by previous tapping. He considers tapping to be a crime (*verbrechen*), there are few exceptions. We must not only give up tapping, we must operate early, so that the numerous dangers which accompany ovarian tumors may not develop. But the operation must not be done too early—not while the tumor is still in the pelvis, as then the operation is very difficult; the cicatrix of the abdominal incision is not so solid as when the abdominal wall has been previously expanded, and the diagnosis between small ovarian cysts and small fibro-myomata is too difficult to decide. It is only when it causes bleeding or other grave symptoms that the small tumor must be removed. It ought, however, always to be removed as soon as it grows large enough to distend the abdominal wall a little, so that the incision may be over the cyst-wall and not over intestine. Any delay after a certain point brings with it dangers. There is the same danger as after tapping, namely, that of malignant degeneration and rupture, or otherwise infection of the peritoneum. Of the first 400 of the author's ovariotomies, 40 had free cyst fluid in the abdominal cavity. Of these, 3 died. Of the remainder, 3 now suffer from peritoneal cancer; 3 have already died of this disease; 1 died of general sarcomatosis; 1 with the suspicion of malignant cerebral tumor, and 3 of whom the author can get no report, and who are probably dead. Of the 400, there were 34 cases of twisting of the pedicle, with 4 deaths, which is a large proportion. The formation of adhesions,

another frequent result of delay, is usually of no great importance, but they annoy the patient and may cause internal strangulation. The adhesions, by reason of the increase of the nutrition of the tumor which they lead to, may favor degeneration. As the tumor increases, general health fails, the abdominal viscera are compressed, and nutrition interfered with. There can be no doubt that when we cease to tap and operate early, the already brilliant results of ovariotomy will be rendered still more so.

Howitz (Copenhagen) agreed with the author in the main, but he believed there are not a few cases in which tapping is a useful preliminary; as in very large tumors; to gain time; in acute diseases; or to enable the patient to travel to the operator. As regards the time of operation, he feared that some might go further than Mr. Thornton, and operate on all tumors as soon as diagnosed. It is not to be forgotten that women with small ovarian cysts may become pregnant.

Sir Spencer Wells defended tapping in rare cases, where an ovarian cyst, or cyst of the broad ligament, is intraligamentous. There is sometimes an advantage to be gained in tapping a few days before operation. Then there are not very rare cases in which the patient refuses ovariotomy and desires tapping. The mortality after tapping is still less than ovariotomy, 4–8 per cent.

This report contains a resumé of the more important papers read in the obstetric and gynæcological section of the congress. It has been directly prepared from the *Centralblatt für Gynäkologie*, Nos. 36, 37 and 38, 1884, which contains a much more satisfactory report than any English periodical. As the space at my disposal has been already exceeded, I am obliged to defer reports of the work of the other societies to a subsequent number.

Reviews and Notices of Books.

Practical Manual of Diseases of Women and Uterine Therapeutics, for Students and Practitioners.—By H. MacNaughton Jones, M.D., M.C.H., F.R.C.S.I. & E., Examiner in Obstetrics Royal University of Ireland, &c. New York: D. Appleton & Co.

The text-books on this subject are now certainly sufficiently numerous to afford the student ample room for exercising a choice in their selection. In this case, the author informs us that from his experience most of the standard works are found by students too voluminous, and his view has consequently been to present them with one which, whilst not omitting anything essential, shall yet be quite within the compass of the time which they will probably be enabled to devote to this branch. The conciseness which this involves necessarily prevents it from being in any wise a competitor of the more expanded and more complete treatises of Barnes, Thomas, Hart & Barbour, and others. It has evidently been carefully prepared for the purpose intended, and, we have no doubt, will be fully appreciated by those for whom it is intended.

Lectures on the Principles of Surgery.—By W. H. Van Buren, M.D., LL.D., formerly Professor of the Principles and Practice of Surgery in the Bellevue Hospital Medical College, &c. Edited by Lewis A. Stimson, M.D. New York: D. Appleton & Co.

These lectures were delivered at the Bellevue Hospital Medical College, in which the late lamented Van Buren held for years the chair of surgery. In his preface, the editor explains that the book is offered, not as a complete treatise on the principles of surgery, but simply such a representation of them as the author thought best fitted to be of service to the student, and to the practitioner who returned to take his place upon the benches of the lecture-room. We think it is well that this explanation was made, because we must confess to some feeling of disappointment in perusing the pages of this book. There is a

want of finish about it, and an almost entire absence of illustrations, which latter are so necessary and important, especially to students. However, there is much in the book to commend it. The first chapter is full of good advice both to the student and practitioner. Referring to "specialism," the author says "a specialty, to be exercised legitimately, must be the outgrowth of an education possessing honest claims to completeness, and at the same, of a fair capacity, if necessity should arise to practice the medical profession in all its branches." The chapters on "hæmorrhage" and "shock" are excellent. By an odd arrangement, the important subject of "inflammation," which is usually made to introduce almost every surgical disease, is treated of in one of the last chapters. The lectures, altogether, make nice reading, and the editor is to be congratulated on the get-up of the book generally.

Handbook of the Diagnosis and Treatment of Skin Diseases.—By ARTHUR VAN HARLINGEN, M.D., Professor of Diseases of the Skin in the Philadelphia Polyclinic, &c. Philadelphia: P. Blakiston, Son & Co.

"Still they come." Every specialist must write his book or die in the attempt. However, we welcome the little book at present under review, as we feel convinced, from a careful perusal of it, that it fills a gap in the literature of dermatology which must have long been felt by American practitioners. It is a ready-reference book on skin diseases, the latter being arranged alphabetically. The commoner affections only are treated fully, while all debatable questions having reference to etiology and pathology are omitted. There are two handsome woodcuts illustrating the primary lesions of the skin. We heartily recommend the book to students and general practitioners.

Materia Medica and Therapeutics: An Introduction to the Rational Treatment of Disease.—By J. MITCHELL BRUCE, M.D., Lond., M.A., Aberd., F.R.C.P.L., Physician and Lecturer on Materia Medica and Therapeutics, Charing-Cross Hospital. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Brothers.

This is one of the "manuals for students of medicine" being

published by the above firm. This series is furnishing an excellent set of text-books, and the selection of the various authors so far appears to have been very successful. The present work contains within a small compass the whole essence of the Materia Medica—both organic and inorganic—and, in addition, very complete sections upon the therapeutical applications of the various agents. Indeed, the greater part of it is occupied with therapeutics arranged in such a manner as to impress the mind with correct principles of treatment, and to lead to the judicious and scientific employment of drugs for the cure of disease. We cordially recommend it to the notice of practitioners and students.

The Physician's Visiting List for 1885.—Thirty-fourth year of its publication. Philadelphia: P. Blakiston, Son & Co.

The arrival of the Visiting List is always a reminder that the year is drawing to a close. It is one of the essentials of the physician's outfit. The pocket-book of Lindsay & Blakiston we have used for many years, and find it answer every purpose. It can be obtained of any size, for 25, 50 or 100 patients per week. Its obstetrical calculation-table, posological lists, poison memoranda, &c., are all very handy, and it contains also a diagram of the chest, from which tracings can easily be taken for marking special points with reference to physical diagnosis.

Books and Pamphlets Received.

The Science and Art of Surgery. A Treatise on Surgical Injuries, Diseases, and Operations. By John Eric Erichsen, F.R.S., LL.D., &c. Eighth edition. Revised and edited by Marcus Beck, M.S. and M.B., Lond. Vol. I. Philadelphia: Henry C. Lea's Son & Co.

The Elements of Pathology. By Edward Rindfleisch, M.D. Translated from the first German edition by Wm. H. Mercur, M.D. Revised by James Tyson, M.D. Philadelphia: P. Blakiston, Son & Co.

The Elements of Physiological and Pathological Chemistry. A Handbook for Medical Students and Practitioners. By P. Cranstoun Charles, M.D. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Bros.

Manual of Chemistry. A Guide to Lectures and Laboratory-work for Beginners in Chemistry. By W. Simon, Ph.D., M.D. Philadelphia: Henry C. Lea's Son & Co. Montreal: Dawson Bros.

Surgical Delusions and Follies. By John B. Roberts, A.M., M.D. Philadelphia: P. Blakiston, Son & Co.

Elements of Pharmacy, Materia Medica and Therapeutics. By William Whitla, M.D. Second edition. London: Henry Renshaw.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, June 27th, 1884.

T. A. Rodger, M.D., President, in the Chair.

Crushed Hand treated by dry and infrequent dressings.—Dr. Shepherd exhibited a patient who, some two weeks before, had received a severe crushing injury of the hand. The palm of the hand was deeply incised from one side to the other, and all the short muscles of the thumb were torn out and lying exposed in the palm. The back of the skin of the hand was enormously distended with effused blood and serum. The extended muscles were replaced, a drain inserted on the thumb side, and the wound stitched up. The back of the hand was deeply incised over each metacarpal bone to allow the effused blood to escape, and the whole dressed with iodoform and pads of naphthalized jute, covered with washed gauze, and firmly bound with an antiseptic gauze bandage. Owing to the oozing of blood the dressing had to be changed next day, at which time the drainage tube was much shortened. It was redressed as before, and as there had been no elevation of temperature, discomfort, or pain, the hand had not been disturbed since that time. Dr. Shepherd now removed the dressings before the Society, and showed that the condition of the hand was most favorable ; there was union by first intention everywhere, except where the drainage tube was, the hand had quite a normal appearance, and the dressings were only stained with a little bloody serum. Dr. Shepherd remarked that this case was an example of many he had treated in the same way, and which showed the benefit and simplicity of dry and infrequent dressings.

Dr. Rodger said that he treated compound fractures from railway accidents with dry dressings of absorbent cotton and iodoform.

Sarcoma of the Skin and Cellular Tissue about the Ankle—Amputation—Recovery.—Dr. Shepherd read a paper on this case, and exhibited both the foot and slides from the diseased

structures. The following is an abstract of the paper, which was published in full in the *Medical News* of Sept. 20, 1884 :

E. M., a delicate-looking youth, aged 18, came to hospital in April last suffering from an ulcerated swelling above the left ankle. The ankle was first injured six years ago by a fall, from which he recovered so as to walk as well as ever, although a slight swelling remained. A year after, it became painful and more swollen. An unsuccessful incision was made for pus, which opening never healed. Three years ago he was kicked on this ankle by a horse, which increased the trouble. The joint itself, since the first hurt, was apparently never affected, but the swelling on the inner side slowly increased, and at different points sinuses would form. On entering hospital, the parts about the inner side of the left ankle were of a shiny, dusky red color and considerably swollen. At the upper part were several sinuses, and near the centre a small ulcer. Pressure, which gave a semi-elastic sensation, was not painful. A free incision was made. After cutting through very thick infiltrated skin, pockets of a tissue like granulation-tissue were opened up. A neoplasm was suspected, and some of the substance from the pockets was sent to Dr. Wilkins for microscopical examination. He pronounced it a very good example of the round-cell sarcoma. Dr. Shepherd at once amputated the leg at some distance above the disease, dressing the stump with iodoform and pads of sublimated jute. Decalcified bone drains were tried, but had to be given up, as they collapsed. The case did well, the temperature after the third day never reaching 99°. The case was instructive, chiefly on account of the difficulties it presented for diagnosis and the importance of its being correct, as sarcoma, especially the round-cell variety, unless removed, is a fatal malady.

Dr. Geo. Ross asked what was Dr. Shepherd's experience with decalcified bone tubes, and why they failed in this case.

Dr. Shepherd, in reply, said that these tubes had been kept in carbolic oil, which made them too soft, spirit being the better fluid to keep them in. They use these tubes in New York, but have difficulty in getting them just right. Some become absorbed too soon ; others never absorb.

Dr. Fenwick had found the indiarubber tubes to give entire satisfaction; in some of his cases of excision of the knee, the dressings were renewed but three times in all.

Dr. Roddick said he made some decalcified bone tubes, and used them twice, but they became clogged. He said McEwen experienced this same trouble, and now passes horse hair through the drain. This he finds prevents clotting. Another objection to them was that the bone tubes sometimes become absorbed too fast, and leave a pocket of pus undrained.

Dr. Stewart exhibited a case of *Multiple Cerebral Sclerosis, having an Apoplectiform mode of onset, and where Syncopal and Apoplectiform attacks frequently recur.* The patient, a man aged 47, hotel porter, came under observation three months previously complaining of obstinate constipation, difficulty in speaking, and dimness of vision. He gave the following history: Three years ago, while in the enjoyment of his usual health, he was seized, while seated on the driver's seat of an hotel 'bus, with giddiness. He was at once carried home, and almost immediately afterwards passed into a state of unconsciousness, which lasted twelve hours. After the return of consciousness, he passed, in a few minutes, into a delirious state of a few hours' duration. For some three weeks afterwards, his wife says, he was "weak and useless," and "his speech was so curious that it was difficult to understand what he said." In the course of a few months he was able to speak much plainer, but not so plain as he could do previous to the attack coming on him. In the autumn of 1882, he spent some weeks in the General Hospital, and while there was under the care of Dr. Ross. Through Dr. Ross' kindness I am enabled to compare his state at that time with what it is at present. With the exception of syphilis, he never had any trouble up to the time of his present affection coming on. He formerly drank to excess, but not since the commencement of his present illness. His father died of what he calls "liver complaint." His mother and only brother are dead, but he is ignorant of the cause in either case.

Present state—Nervous system.—There is a considerable degree of mental weakness, which has only been apparent dur-

ing the past year. It is progressively becoming more and more pronounced. He frequently loses his way in the streets. He is extremely emotional, laughing and crying without an apparent cause. His memory for recent occurrences is very poor, but good for trifling events of many years past. He has a very exaggerated opinion of his own cleverness. As he never received any education, he is unable to write. His speech is markedly slow, monotonous, and syllabic. The voluntary power in both upper and lower extremities is good. When he undertakes to perform any movements, the muscles commence to tremble. This tremor, however, is not always marked; very frequently it is absent, especially in the afternoon and evening. It is very pronounced immediately after getting out of bed in the mornings. The nutrition of the whole voluntary muscles, except the tongue, is normal. The patellar and superficial reflexes are present. The co-ordination and muscular sense are not interfered with. There is no disorder of sensation. There is no paresis of the bladder or incontinence of urine. There is no obstinate constipation. Dr. Buller has examined his eyes. He finds simple atrophy of both discs. Vision is *nil* in the right eye, and almost so in the left. There is no paralysis of any of the ocular muscles. Hearing, taste and smell are good. There is paresis of the respiratory branches of both facial nerves, as is evidenced by the expressionless aspect of the lower half of the face, the obliteration of the naso-labial folds, the dribbling of saliva from his mouth, and by his inability to whistle and to show his upper teeth. The soft palate is very slightly paretic. When the mouth is opened, the lower jaw trembles. He has difficulty in protruding his tongue, and when he attempts to do so, it commences to tremble. There is not only difficulty in protruding the tongue, but there is difficulty in keeping it protruded. The tongue is very slightly wasted, but it is not the seat of any fibrillary twitchings. There is no impairment of either the motor or sensory divisions of the trigemminus. He has no difficulty in swallowing. He complains much of giddiness, especially when walking; objects, he says, are constantly turning around him. He is subject to both syncopal and apoplectiform attacks; both

coming on suddenly, without warning,—the former lasting a few seconds, and attended with paleness of the face ; the latter lasting several hours, and attended with suffusion of the face and an elevated temperature. His pulse is constantly beating between 40 and 45 times in the minute, and at times it is irregular in rhythm. His urine is free from both albumen and sugar.

The patient's present condition was then contrasted with what it was when he was in the General Hospital 18 months previously.* At that time the symptoms present were purely bulbar. Since that time the bulbar symptoms have gradually increased in severity, and, in addition, we have involvement of the optic tracts, cerebrum, and in all probability the cerebellum also. Although the giddiness may be explained otherwise, it is probable that its mode of causation in this case is the formation of sclerotic nodules in the cerebellum. Whether the slow pulse is a proof of the implication of the vagus nucleus, it is impossible to say. If so, it is necessary to suppose an irritative lesion of the cardiac inhibitory nucleus. The case is undoubtedly one of multiple cerebral sclerosis, commencing in the pons and medulla and gradually extending into the cerebrum, cerebellum, and optic tracts. There is no evidence of the pyramidal columns being affected either primarily by the sclerosing of their structure or secondarily by a descending degeneration. Neither is there any proof of any other portion of the cord being involved. The case is therefore one of pure cerebral sclerosis. It is noteworthy for its peculiar mode of onset, and for the apoplectiform and syncopal attacks to which the patient is liable. Another interesting feature in this man's case is the intermittent presence of tremor. In the great majority of cases of disseminated sclerosis, tremor on voluntary movement is the most constant and most characteristic symptom present.

Dr. Geo. Ross said he had not seen the patient since he reported the case to the Society. At that time he had recently had an attack, apoplectiform in character, which he believed to have been due to a hæmorrhagic clot.

* A detailed report of his then state will be found in the Society's Transactions recently published. Dr. Ross gave an account of his condition at the meeting held on December 1st, 1882.

In reply to Dr. Roddick, Dr. Stewart said his patient had taken iodide of potassium.

Dr. Hy. Howard said that these cases of sclerosis vary so much that it is difficult to group the symptoms so as to tell positively whether the brain or the cord was affected primarily. Erb says that out of 200 cases, 171 were syphilitic, and the cord was first affected. Dr. Howard's own observations showed that 7 out of 10 had syphilis. A man in the asylum denied having had syphilis till the marks were found ; his first symptom was impotency. He (Dr. H.) had never seen a case cured. Insanity in those cases of progressive paresis was caused by reflex action from the cord where it is diseased to the higher nervous centres, which are the lowest organized.

Cancer of the Stomach; *rapid growth of the tumor.*—Dr. Campbell related the following particulars of this case :—Had been sent for early in May to see Mrs. L., aged 41, who was complaining of pain over the stomach, but not very severe. As her mother had died of cancer, he was pretty sure this would prove to be the same trouble, although no tumor could, as yet, be made out. Within a week vomiting set in. *June* 1*st*—Rather worse. 5*th*—Could keep nothing on her stomach. On the 7th, could feel a nodule, which, in 48 hours, increased wonderfully from being the size of the top of the thumb to that of an egg. The vomited matters were the color of bile—never bloody. The patient died a week later. The pylorus and lesser curvature were implicated. There was stenosis, but not much dilatation of the stomach. Pain, which was never very severe, was less toward the end. There was no cachexia present.

Dr. Trenholme said he had had two similar cases. In one, there were no symptoms till within three or four days before death, although a cancerous mass the size of a turnip existed, which involved the stomach ; the other was that of an old gentleman, who ate well up to the last, and had very little pain.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

Perforation of the Vermiform Appendix, with Peritoneal Abscesses. DEATH AFTER A LONG INTERVAL FROM PYÆMIA.—Dr. D. W. Finlay read a case with the above title. John L., a baker, was admitted into the Middlesex Hospital on January 4th, 1884. He complained of severe pain over the whole abdomen, which was moderately distended, tender, and tympanitic. The areas of liver and splenic dulness were normal. Heart and breath sounds were normal. Tongue dry and coated, with a brown strip down the centre; cheeks flushed, lips dry and cracked. Pulse was 96, compressible; temperature 96.6°; respiration 24, and entirely thoracic. The urine was turbid with lithates, and very acid, specific gravity 1,034, free from albumen and sugar. As to history, he stated that he had had a similar attack three years previously, suffering from abdominal pain, with sickness and feverishness. Otherwise his health had been good. His present illness came on a week before admission with griping pains across the lower part of the belly, followed by vomiting, headache, and diarrhœa. He was treated with opium, and put upon a diet of milk and beef-tea, and three days after admission appeared much better; the general tenderness of abdomen had disappeared, but there was a spot midway between the costal margin and iliac crest on left side, where tenderness remained, and the percussion note was dull. On January 9th his bowels were opened for the first time after admission, the motions being loose and light in color, with a few small scybala. During the night he had been seized by pain in both parotid regions, and this was followed by swelling and tenderness, with inability to open the mouth. Both swellings suppurated, and were incised; his temperature slowly rose, and he became delirious, and sank somewhat suddenly on January 16th. He had had no rigors. At the *post-mortem* examination three large and as many small abscess sacs were found within the peritoneum, the oldest-looking being round the vermiform appendix, which was perforated about half way from its attach-

ment. The appendix was plugged by a small mass of fæcal matter on the cæcal side of the perforation. The peritoneal surface generally showed old fibrous bands and greasy-looking flakes uniting the coils of intestine together, with some recent injection, but almost no recent lymph. The other organs were fairly normal, except that the lungs were œdematous, and the left pleura contained a quantity of clear serous fluid. The case seemed interesting from the prolonged latency of the disease, the perforation of the appendix having probably taken place on the occasion of the previous attack, adhesions being then formed which prevented for the time a fatal result. It was certain at all events that the abscess sacs were of very considerable age, and it was a striking fact that the man should have been able to go about his daily work apparently in good health with such a condition of his abdominal cavity.

Dr. Mahomed said he had been lately considering the subject of recurrence of peri-typhlitis, and had been proposing to himself to perform an operation for removal of concretions from the cæcum by means of abdominal section. He had designed what he considered to be a suitable operation, by practioe in the *post-mortem* room. He found that by means of an incision, as for ligature of the external iliac artery, the vermiform appendix could be easily reached, in some cases without opening the peritoneal cavity. In conjunction with Mr. C. J. Symonds he had successfully removed a calculus from the vermiform appendix of a patient suffering from recurrent attacks of peri-typhlitis. He thought that a certain amount of induration was a necessary feature in such a case, to act as a guide during the operation. He quoted Professor Anstin Flint's observation of the loss of hepatic dulness in cases of cæcal perforation. Such a sign, if true, was a useful point in diagnosis. In reply to the President he said that the calculus which he had removed was mainly phosphatic.

Dr. C. T. Williams mentioned a case in which a localized peritonitis from perforation of the appendix was diagnosed. The patient recovered, but after his subsequent death from pneumothorax, it was found that a small and perfectly closed sac had

become formed around the seat of the ulceration. Looking at the frequency with which concretions might take place within the vermiform appendix, and the numerous instances of recovery after peri-typhlitis which had been recorded, he thought we ought to pause before considering such a serious measure as operation, and be quite sure that recovery in any other way was impossible.

Mr. Howard Marsh urged the importance of early recognition in these cases. He fully agreed with Dr. Mahomed in the advisability of operating in such cases, and he believed that in course of time the operation would become a recognised practice. He pointed out the possibility of the anatomical relation of the vermiform appendix varying with respect to the peritoneum. The first step in diagnosis must be to determine this relation. He mentioned a case lately seen in which perforation of vermiform appendix was not found when it had been diagnosed.

Mr. Bryant believed that the operation suggested by Dr. Mahomed was the best that could be devised in such cases. He thought, however, that an exact diagnosis of the position of the vermiform appendix was not possible. The inflammation generally begins in the connective tissue around the vermiform appendix; in other cases the ulceration is in the cæcum itself and spreads around it. Suppuration may occur and pus may burrow its way in all directions, in which case the result is almost always fatal sooner or later. He thought that the practice of early incision was right, and mentioned three cases in which pus had been evacuated by this means. The diagnosis was not difficult on the whole, but he thought that a very valuable symptom, that of pain in the course of the anterior crural nerve, was not sufficiently recognized. In one suspected case he had found that by using forced extension, pain was produced in the inflamed cæcum, thus indicating the seat of lesion. He should have occasion elsewhere to refer to this subject, but suggested that this question of early operative interference in peri-typhlitis should be seriously considered.

Mr. Christopher Heath thought that the diagnosis of perforation of the vermiform appendix outside the peritoneum was

generally rendered easy by the occurrence of emphysema along the course of the cæcum.

Mr. R. W. Parker mentioned a case of a boy who had injured his abdomen when suffering from inability to pass water. Vomiting ensued for twenty-four hours before death. The vermiform appendix was found to have been perforated, several hard concretions lying within it. There was local peritonitis and general peritoneal inflammation of more recent date.

Dr. Mahomed observed that he would put aside the question of operating during an attack of peri-typhlitis. He thought that an operation would only be admissible between the acute attacks.

Dr. Longhurst mentioned a case where five attacks occurred in two years, ending in ulceration and abscess. He asked if any treatment could be suggested to prevent the liability to such recurrence.

Dr. Finlay referred to the observation of Dr. A. Flint, mentioned by Dr. Mahomed, and said it was familiarly known at the Middlesex Hospital that intestinal perforation might lead to obliteration of hepatic dulness.—*Proceedings Clinical Society, London, in Medical Times.*

The Aspirator as a means of Treatment.—*Pneumothorax.*—In some cases of traumatic pneumothorax, I think aspiration may be practised with the best possible results. Dr. Herbert Page has published a case in which, owing to a wound of the lung caused by the in-driving of a fractured rib, there was pneumothorax, with total collapse of the right lung. There was great dyspnæa and collapse. The chest was punctured, four hours after the accident, by Dieulafoy's cannula ; and, on exhausting the air from the pleural cavity by means of the pneumatic aspirator, immediate improvement in the condition of the patient followed. At the time of the operation, blood was drawn into the receiver ; and an examination of the chest on the day after the injury revealed dulness on percussion at the base on the left side, due to the presence of blood. The aspirator was used three times subsequently, for the removal of the blood and the further withdrawal of air from the pleura. The patient made a good recovery. Dr. Page, while admitting the advantages of the

use of the aspirator in these cases, drew attention to a possible source of danger from hæmorrhage into cavities exhausted of their contents by the aspirator. There can be no doubt that, in a case of wound of a vessel in the lung by the broken rib, accompanied by pneumothorax, the withdrawing the air from the pleura might, and probably would, encourage bleeding from the wounded vessel; but here, as in effusion of fluid into the pleura, I would urge the great importance of withdrawing the air very gradually, and not attempting to empty the chest-cavity entirely at the first aspiration. If this precaution be taken, I cannot think there is any very great risk of increasing the hæmorrhage. At any rate, as in the case related by Dr. Page, the relief given quite outweighed any danger there might be from such a source.

Pericarditis.—Removing fluid from the pericardium by means of aspiration, in effusion into the pericardium, has been now practised in this country pretty often, but very much more so in France and Germany. Mr. Bartleet of Birmingham tapped a case of Dr. Russell's, who was suffering from acute rheumatism, urgent dyspnœa being the prominent symptom. He withdrew 14 ounces of fluid, and the patient did well. Dr. Shingleton Smith also reports a case in which he removed a quantity of fluid from the pericardium, and the patient made a good recovery.

Ascites.—There can be no doubt of the use of the aspirator in removing fluid from the abdominal cavity in cases of ascites. The advantages over ordinary tapping are that the fluid can be withdrawn slowly and gradually, and can be stopped directly the patient shows the least sign of faintness or dyspnœa. The operation is so simple that it can be repeated again and again without any fear of setting up local inflammatory mischief.

Liver.—There is, perhaps, no organ in the body which is so subject to abscesses and hydatid cysts as the liver; and in these cases the aspirator can be introduced, the abscess or hydatid emptied, and the patient, in all probability, cured; at any rate, he is put in a very much better position than he could possibly be by any other mode of treatment. Before the aspirator was invented, in cases of abscess of the liver, we were obliged to wait until there was adhesive inflammation, causing the peri-

toneum covering the abscess to adhere to the parietal peritoneum, before the surgeon could venture to open the abscess either by the lancet or by the trocar and cannula. Abscesses have often emptied through into the peritoneal cavity, with the result of the death of the patient, or they may have burst into some portion of the intestine, and so emptied themselves, in which case the patient usually recovered; they may perforate the diaphragm, and burst into the lung, the pus being expectorated, and here, again, many patients have recovered. While, however, the abscess was eating its way into these organs, the patient's strength often failed and he died. The introduction of the aspirator has happily been the means of our saving many poor sufferers from months of agonizing pain, and also very many have been restored to health by its early application. I think it cannot be too forcibly impressed upon every physician or surgeon, that, if a patient present himself who has a circumscribed hard swelling in the liver, the nature of which is doubtful, it should at once be punctured with the aspiration-needle, and if it should turn out to be an abscess or hydatid cyst, by means of the pneumatic aspirator the cavity can be emptied. Again, I would go further and say that, if the patient present any symptoms of hepatic abscess, and if there be any one tender spot traceable over the liver, the surgeon is quite justified in puncturing the liver at the tender spot, with a view of discovering an abscess. Surgeon-Major Condon has recorded twelve cases that came under his notice and treatment: seven perfectly recovered and five died; of these five he points out that "four of them were in a dying state when received by me under treatment, and the operation was merely resorted to as a *dernier ressort*, and with the satisfactory results of relieving suffering and prolonging life." In one case he tapped an abscess fourteen times, when a second abscess was discovered, which was tapped sixteen times, and the patient was enabled to be removed to a P. & O. steamer and conveyed to England, where he died. Mr. Condon remarks that the enormous quantity of pus taken from the liver (about 400 ounces) is, he believes, the largest quantity taken from a human liver on record. Numerous other cases have been reported by

Sir Joseph Fayrer, Dr. Ball, and others. Dr. Beahmy has practised it in many cases, and all but one were successful, in which case he did not reach the abscess. In some cases recorded, when liver abscess was suspected, the liver was sometimes punctured several times, and no abscess was discovered; but the patients were very much relieved by the operation, the pain disappeared, and the distressing symptoms were much alleviated. Dr. Heaton reports a case of hydatid of the liver successfully treated, and draws attention to the advantage of this instrument over the trocar and cannula, as in the latter you have to set up adhesive inflammation of the peritoneum before tapping. Cases also have been reported by Mr. Jessop, and also by many French surgeons.

Tympanites.—Aspiration has been practised successfully in extreme tympanites, and in emptying ovarian cysts; but I do not know that there is much advantage in this instrument over the trocar and cannula in these affections.

Distension of the Bladder.—In distension of the bladder due to either impermeable stricture or traumatic rupture of the urethra, or either enlargement or cancer of the prostate, when it is found impossible to pass a catheter, I have had great reason to be satisfied with the use of the pneumatic aspirator, the bladder being punctured with a fine needle over the pubes; and here I recommend the use of a large curved needle, so that you can efficiently empty the viscus. In one case I had under my care, of impermeable stricture of the urethra, with retention of urine, in which I failed to pass a catheter, I emptied the bladder with the aspirator over the pubes; and in a few hours afterwards, the spasm being relieved, the patient passed his urine by the urethra. I was enabled to pass a small instrument through the stricture, which I split up, and the patient made a good recovery.

Hernia.—The French surgeons have practised with good results aspiration in cases of strangulated hernia, and in our own country cases have been reported by Mr. Jessop of Leeds and others. The cases in which it appears to me that such a course might be adopted are those in which there is a collection of fluid

in the sac which prevents the surgeon from being able to use direct pressure on the strangulated gut, and cases where there is a collection of flatus in the gut itself, which increases its calibre and prevents its return. In such cases as these, it is not difficult to see that great good might result by aspiration; and if, after removing the fluid in the sac, or the flatus from the gut, we fail to be able to return the hernia, I do not think the patient is placed in any worse position for operation than before. Dieulafoy reports 27 cases in which he used the aspirator for strangulated hernia, 20 of which were successful reduction of the gut by taxis following the operation. In the remaining seven cases, it was harmless; and of these, three died, and four recovered after the ordinary operation for hernia. At University College Hospital, seven cases are reported, one followed by reduction, and no fluid was withdrawn from the sac; yet the impulse returned, and the patient recovered; in four, it failed entirely; in three of these, the ordinary operation was performed successfully; the remaining case was mentioned at the time of operation. At the *post-mortem* examination, no gas could be squeezed from the punctures of the needle.

Joints.—In cases of effusion into the joints, much has been said and written; but think now, in France especially, the importance of removing fluid from synovial cavities is fully recognized; and, in this country, it is practised much more frequently than it was a few years since. In a discussion that took place some years ago at the Academy of Medicine in Paris, in which Dr. Verneuil, Demarquay, and others took part, the conclusions arrived at were that pneumatic aspiration in hydrarthrosis of the knee-joint, both in its acute and chronic form, is a most useful remedy. In the acute, when the pain is most severe, owing to dislocation of the capsule of the joint, and in the chronic form, that will not yield to any other treatment, the method of performing the operation is, I think, of great importance. An elastic bandage should be applied both above and below the knee, or broad strips of plaster would do nearly as well. These should be drawn tighter as the contents of the joint are withdrawn, which takes place very slowly, owing to the viscidity of

the fluid. The cannula should be from a 1-20th to 1-12th of an inch in diameter, and the puncture should be made in an upward direction, but at the external edge of the patella. When the joint is emptied, a little styptic collodion is painted over the puncture, a small pad of antiseptic gauze or lint placed over, and the whole joint evenly strapped up. The leg should be bandaged, and, if thought necessary, an ice-bag applied to the joint, and the limb, for a day or two, kept at perfect rest by the application of poroplastic splints. Mr. Jessop has practised aspiration successfully in pyæmic abscess of the hip and knee joints, and has also reported cases of pneumatic aspiration in ordinary dropsy of the knee-joint. In cases of fractured patella, with either effusion of serum or blood, Mr. Christopher Heath has now for some time practised emptying the joint by aspiration before putting up the fracture; in this way he has obtained most happy results.

Abscesses.—Deep abscesses of the thigh or ilium, lumbar and psoas abscesses, may all be well treated by aspiration.—*F. B. Jessett, in Brit. Med. Journal.*

Use of Hodge's Pessary in Fractures of the Lower Jaw.—Dr. W. J. Naismith (*Lancet*) describes a fracture of the lower jaw at the symphysis, with a transverse wound two inches in length over the mental protuberance. The fragments of the jaw were freely movable, and it was desirable to apply an apparatus which would fix the bone in place immovably, and at the same time allow the wound to be dressed. Accordingly a Hodge pessary was brought into use by bending it so as to allow the chin to protrude through its ellipse. One bar was moulded so as to support the fracture anteriorly, the other steadied it from below, while the rounded ends afforded admirable lateral pressure on each side, at a point in front of the angles of the jaw. To the rounded ends of the pessary tapes were sewn, two on each side, over the padding, and secured over the head, or to a fillet, and around the neck by small buckles. For fractures of the maxilla, at or near the symphysis, with or without wound, the Hodge pessary seems well adapted. It can be bent to fit any size of jaw, and in the qualities of comfort, lightness and coolness, compares very favorably with the solid cumbrous appliances included under the head of moulds.—*Md. Med. Jour.*

CANADA

Medical and Surgical Journal.

MONTREAL, NOVEMBER, 1884.

HYDROCHLORATE OF COCAINE.

The exchanges which have come to hand during the past two or three weeks, more particularly those published in the large cities of the United States, have contained extended notices of the anæsthetic properties of this remarkable drug. Ophthalmologists are especially enthusiastic regarding it, and hitherto nearly all the experiments and clinical observations have been made by them in connection with the surgery of the eye. Experiments were first made with the drug before the Ophthalmological Congress recently held at Heidelberg, where a solution was dropped into the eye of a patient, causing complete anæsthesia of the conjunctiva and cornea. Dr. Noyes of New York, who happened to be present at the congress, was the first to bring the preparation prominently before the notice of the profession on this side of the Atlantic, and since then several observers have been busily engaged investigating its properties.

Cocaine, which has been known for some time, is an alkaloid obtained from the leaves of the erythroxylon coca. It combines with acids to form salts, which are very soluble in water. Ten years ago Dr. Ott, an American physiologist, showed by experiments on animals that a solution of cocaine, given in small doses, stimulated, and then, in larger doses, entirely destroyed sensibility, acting on the posterior columns of the cord and on the sensory nerves.

The preparation now so prominently before the profession—the hydrochlorate of cocaine—has been known for about a year. Laryngologists have been using it for some time past locally to diminish the sensibility of the larynx for purposes of examination.

But it was not until Dr. Koller demonstrated its anæsthetic action on the eye at Heidelberg, the other day, that ophthalmic surgeons were aware of its immense value to them. The drug is best employed in a two per cent. aqueous solution, although, doubtless, cases will arise where a stronger preparation may be required. The most approved method for causing anæsthesia of the eye-ball is to instil into the conjunctival sac three or four drops every five minutes for twenty minutes. One observer has found two drops every ten minutes for two applications sufficient, proving that the same strength of solution will not be equally effective in all persons. In about three minutes after the first application the sensibility of the eye-ball begins to lessen, and so continues for about twenty minutes, when a rapid restoration to the normal takes place, until, in half an hour, the sensibility is completely restored. The application is painless, and the only appreciable effect produced on the eye is dilatation of the pupil, which, however, seldom continues longer than twenty-four hours, while the accommodative power is disturbed for a much shorter time.

So far, observations with regard to the action of cocaine have been confined almost exclusively to the eye, although Roosa is said to have employed it with success in a case of tympanic neuralgia, which was relieved by two applications. Dr. Polk of New York also reports two cases in which trachelorrhaphy was performed, the cervix having been previously treated with a four per cent. solution of hydrochlorate of cocaine. If our information be correct, may it not be reasonably expected that this interesting drug will in time become universally employed in surgery as a local anæsthetic? We notice that some experiments made recently by Mr. Arthur Benson, and reported before the Ophthalmological Society of London, were somewhat unfavorable to cocaine.

—At a largely attended meeting of the Medico-Chirurgical Society of Montreal, held on the 7th inst., the following resolutions were unanimously passed :—

Resolved,—That this Society has every reason to believe that the statements contained in the Report of Dr. Tuke of London, Eng., upon

our Provincial Lunatic Asylums are in every material respect true and well-founded;

That these statements show a most lamentable state of things as regards the general, and especially the medical, management of these Institutions;

That it appears to this Society to be the imperative duty of the Provincial Government to institute a thorough investigation by competent persons into the entire system of management of the insane poor in this Province;

That the "farming" or "contract" system, either by private individuals or by private corporations, has been everywhere practically abandoned, as being prejudicial to the best interests of the insane and producing the minimum of cures;

That, in the opinion of this Society, all establishments for the treatment of the insane poor should be owned, directed, controlled and supervised by the Government itself, without the intervention of any intermediate party;

That the degree of restraint known to be employed in our Provincial Asylums is, according to the views of the best modern authorities, excessive. That the ablest European, American and also Canadian alienists have almost entirely given up any method of mechanical restraint. That these facts call urgently, in the name of humanity, for reform in this direction in our Provincial Asylum.

Resolved,—That this Society concurs fully in the opinion already expressed by Dr. Tuke in his report, to the effect that "the authority of the visiting physician (Dr. Henry Howard), appointed and paid by the Government, has been hitherto almost, if not entirely, *nil*." His hands have been so tied that he could not be held responsible for the way in which the Asylum has been managed.

—We have on more than one occasion alluded with pride to the character of the biological work which is being done at University College, Toronto, by Prof. Ramsay Wright and his pupils. They have now issued a complete monograph of the anatomy and histology of the cat-fish (230 pp. and 8 plates), which will be not only an invaluable and much wanted guide for students, but which contains many new points of special interest to workers in this field. Prof. Playfair McMurrich, of the Guelph Agricultural College, Mr. A. B. McCallum, and Mr. F. McKenzie, have been Professor Wright's collaborators in the work.

—Mr. Vanderbilt's gift of half a million dollars to the College of Physicians and Surgeons of New York is well timed and well placed. Well-timed, because higher medical education is languishing somewhat in the United States, and the influence of the stimulus of Harvard and the University of Pennsylvania needs refreshing; well placed, because the 23rd street school has of

late years been struggling towards the light, and can now, with this money, make greater efforts to give New York one *first-class* medical college. It seems a pity that the greater part of the money must go in land and bricks and mortar. A large block has been secured close to the Roosevelt Hospital, at a cost of about $200,000, and the buildings will be commenced as soon as the plans can be arranged. The Roosevelt will be utilized for clinical work. Happily the influence of such a donation is not entirely local; giving is contagious, and we expect to hear of millionaires in other centres following Mr. Vanderbilt's noble example.

—A physician in extensive practice has daily opportunities of judging of the force of the maxim that "truth is stranger than fiction," and we have often wondered that some of these experiences have not found their way into print, disguised as short tales. Some of the stories in Dr. Warren's "Diary of a late Physician" could be easily matched.

—Two well-known American physicians have recently entered the literary arena as novelists. "In War Time," by Dr. Storer Mitchell of Philadelphia, has been delighting readers of the *Atlantic Monthly*, and grows in interest as the conclusion is approached. This is, we believe, Dr. Mitchell's first novel, but he has achieved more than a local reputation by his poems, a volume of which was issued a year or two ago. Dr. Hammond's "Lat" is not his first venture, but appears to have had a decided success; some of the English criticisms of the work are exceedingly favorable.

—Since the Hayvern murder case, the question of low temperatures in disease has had a special interest to many of our local physicians. They are met with under three conditions—drunkenness, with exposure, in which there is a well authenticated case (Renicke) of recovery after a temperature of 24°C. (76°F.); in mania, particularly of old people, in melancholia, and in progressive paresis, very low temperatures have been met with, one as low as 23.75°C. (74-75°F.); and, lastly, in injuries and disease of the cervical part of the cord, in which, occasion-

ally, a reduction in the body heat has been noted, though more commonly an elevation. The lowest rectal temperature on record is 23°C. (73.40°F.), in a case of limited hemorrhage into the medulla, in a patient brought to Prof. Thierfelder's clinic at Rostock. The man lived 24 hours after, and the temperature did not rise above 28°C. (82.40°F.)

—The old code State Medical Association of New York holds its first session in New York on the 18th and three following days. The meeting is likely to be a very enthusiastic one, but it will widen the breach between the two sections of the profession in the State, widen it, we fear, to an extent beyond the possibility of ultimate repair.

—We notice in the daily papers that the British Columbians are becoming very uneasy lest the Chinese should import leprosy into the country, several cases of which have already been detected among them. The experience of California should reassure them, for during the 35 years in which Chinese immigration has been going on, there has been only one doubtful case to show that it has been transmitted to a European. It would be well, though, to know precisely the extent to which the disease prevails on the Pacific coast.

PERSONAL.

—We hear that Dr. Hammond of New York purposes spending the winter in Washington, where he has built a fine mansion.

—The many friends of Dr. Metcalf of New York will regret to learn that his health is in a very precarious state.

—Dr. Hack Tuke of London sailed from New York in the *Aurania* on the 20th ult. He made a tour of inspection of all the eastern and a great number of the western asylums.

Medical Items.

A Laxative Decoction.—The following decoction is highly recommended by a writer in a recent number of the *Memorabilien:* A tablespoonful of a mixture of equal parts, by weight, of senna leaves, frangula bark, and licorice root is to be boiled for ten minutes in a pint of water. One half is to be drunk in the morning and the other half at night. The latter portion may be

allowed to stand without straining, and, should the morning portion have acted sufficiently, may be kept for the next morning. This decoction is particularly recommended as a "spring physic," as it can be taken daily for weeks together, is not open to the objection of distending the intestine with gases and disturbing the digestion, like mineral waters, and is so agreeable to the taste that ladies take it willingly.

THE MODERN VIA AD ASTRA—A MEDICAL FABLE.—Once upon a time a poor but humane physician was riding along a road which led by a dark forest, when he saw by the wayside a sick and miserable dog which had lain down to die. Moved with pity he got down from his carriage, picked up the poor animal tenderly, and gave it some food and drink. Suddenly the dog vanished, and he saw standing before him a beautiful fairy. "You have saved me from a miserable doom by your compassion," she said; "command now anything you wish and it shall be yours." The astonished physician replied, "I am a poor man, I should like to be rich." The fairy waved her hand, and extended to him a piece of paper and a bottle filled with a dark-colored fluid. "Here," she said, "is a prescription for an Infallible Compound Hair-Restorer; it will never fail, and it has been endorsed by the leading clergymen on both continents. The world is yours! Do you wish more?" "I am a quiet man," replied the doctor, "and little known; I should like to be famous." "You shall be more; you shall be immortal." Waving her hand again, she presented to him a small, dark, and curiously-shaped instrument. "See," she exclaimed, "it is a new and an 'Unquestionably Perfect Pessary.' It radically restores every malposition. Your name is blown into the side. Generations of suffering women and successful doctors will read and bless you. I have tried it myself," she added, blushing a little, and vanished.—*Boston Med. & Surg. Journal.*

Morse's Glycerole of Celery Compound.—About a year ago, at the suggestion of Dr. Jas. H. Burns of Toronto, this Compound was placed before the profession to be used instead of the more powerful drugs in the treatment of teething infants and adults suffering from nervousness, etc., etc. The after effects of opium are well known and deplored. Upon young children, in any case, the continued use of opium is very objectionable. A remedy having the necessary soothing and quieting effects of opium, followed by a tonic and nutritive action to the patient, should be invaluable to the practitioner. Such a remedy we have in CELERY COMPOUND, which needs only a thorough trial to demonstrate its value. The proprietor guarantees the formula to contain *no* opium in *any* form, and only the ingredients therein mentioned, flavored with anise. It can be given in large doses, as a tonic, to the most delicate infant, with perfect safety.

CANADA

MEDICAL & SURGICAL JOURNAL

DECEMBER, 1884.

Original Communications.

MISSED ABORTION.

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(*Read before the Medico-Chirurgical Society of Montreal.*)

Before I enter upon the material which explains my motive in bringing this paper before you, I think it would be well to explain definitely what is meant by the term *missed abortion*, and show by analogy how it is related to, and how it differs from, some other obstetric conditions. By missed abortion is understood an arrest of pregnancy in the early months of gestation. Abortion is threatened. The fœtus dies, but is not expelled as is usual in cases of abortion. Milk sometimes appears in the breasts. Hæmorrhage may occur from the uterus, or may not. If the ovuline membranes remain entire, the process undergone by the uterine contents is generally that of *mummification*—a peculiar form of decomposition, *but not putrefaction*. It is only when germs are admitted—and generally when rupture of the membranes and escape of the liquor amnii has taken place—that putrefaction and the more or less complete dissolution of the ovum ensue. In such cases we will observe that the woman, as she advances in the apparent condition of pregnancy, gradually gets smaller instead of larger. She may or may not have a dark, non-offensive, muddy discharge, which may be constant or intermittent in character. Her general health is not as good as usual; her digestive system is not working as it should; the

tongue is coated, and breath offensive. There is a heavy, dead weight feeling in the pelvic region, and at last expulsion of the uterine contents takes place unexpectedly. This expulsion occurs usually, though not invariably, before the expected full term of pregnancy would have been reached. The mass expelled represents the nearly dried, shrivelled fœtus rolled up in the membranes and placenta. It is of a dirty brown color, firm in consistence, and is in the so-called state of mummification. It may be asked, "What is this state?" In answer, we can only say that it is a state of decomposition wherein the fluids or juices of the embryo become absorbed after its death, and that the solids almost alone remain. There are several theories advanced regarding the agency at work in this process of absorption. The most reasonable, probably, is an augmented rapidity of endosmosis, due to a larger percentage of saline ingredients in the liquor amnii in the early and middle periods of gestation.

This mummified condition has often been observed in cases where death of fœtus has been due to a process of gradual inanition from inadequate blood supply; as, for instance, in the case of torsion or constriction of the umbilical cord. I do not know that we can correctly give a definite name to this particular form of decomposition. We are sure, however, that it is not a putrid change,—no atmospheric air has come in contact with it; it is non-septic and harmless. Mummification often occurs in twin pregnancies—one fœtus dying, the other going on to full term, when both are generally expelled together. To enter into the cause of death of the fœtus in these cases would be a digression. I will, however, say that we find in many cases there is a marked adhesion between the placenta and the uterine walls, which may also play some part in determining a short or long term of retention. When a mummified fœtus has been subjected to much intra-uterine compression, the term "*Papyracious*" is applied to it. Another form of decomposition which the dead fœtus in utero will undergo is known by the term *Maceration*. Here a granular degeneration and dissolution of the anatomical elements are everywhere evident. A fœtus of one or two months may become completely dissolved away,

nothing whatever remaining. Instead, however, of a process of *desiccation*, as in mummification, we have here one of *increase of moisture*, or true *post-mortem* œdema and hydrops. The œdema is most apparent over the cranium, hands, feet, abdomen, and sternum. The cranial sutures are separated, the joints are disarticulated, and the periosteum has become detached from the long bones. The vessels are filled with dark blood. The serous cavities are distended with bloody serum. The brain is a greyish pulp. Fat crystals are found in the tissues. The accumulation of fat is sometimes so abundant that the term *fatty degeneration* is often applicable to this condition. In reference to embryos which dissolve in the ovum-sac *outside of the uterus* in a few hours, I would say that the fact bears no relation whatever to the subject of missed abortion. That the condition is simply the result of putrid decomposition attacking an embryo which had just ended its physiological state, and was suspended in an albuminous fluid exposed to atmospheric air; and that it is identical with that condition met in the egg of the common fowl after a like long exposure, and which, in common parlance, we are wont to call a "rotten egg."

A condition allied to missed abortion, but differing from it in some respects, is one called MISSED LABOR. It resembles it because there is an arrest of pregnancy (death of the fœtus). But instead of this arrest occurring in the early months, it occurs at, or close to, the normal time of expected delivery. The uterus makes an effort at expelling its contents, but fails; probably the amniotic fluid escapes, and the uterus carries the dead fœtus past the normal term of gestation to a period varying from a few weeks to months, or even years, if the patient survive so long.

Another condition remotely allied to the subject I might here mention in a passing way is that of PROTRACTED PREGNANCY, by which we mean pregnancy *without* interruption is carried beyond the normal period of gestation. Many authorities do not believe in the existence of such a condition. Dr. Matthews Duncan, however, gives an interesting case of protracted pregnancy and missed labor occurring in the same patient and from

the same conception. The patient was the subject of extreme anteversion of the uterus, which could not be replaced. She last menstruated on 12th December. Her confinement was expected on 17th September. The motion of child ceased Sept. 26th. On October 17th she had a chill and became feverish, without indications of labor commencing. She was artificially delivered on the 18th of October. The child was enormous. The mother died on October 24th. Here we have the fœtus surviving in utero the normal term of gestation by nine days. Twenty-one days after its death evidence of septic absorption became apparent, and the woman was artificially delivered on the following day.

As regards the pathological bearing in the history of these cases of interrupted pregnancies, I cannot do any better than quote from Scanzoni, when that writer speaks of the various forms of apoplexy of the ovum, causing not only death of the embryo and abortion, but also of the formation of so-called *true moles* when abortion does not take place. It is hardly necessary to say here that Scanzoni's true mole is simply a *product* of missed abortion. He says:—

1. When the flow of blood from the utero-decidual or utero-placental vessels is inconsiderable, it does not separate the ovum in the greater part of its circumference, or by mechanical pressure arrest its further development, so that the blood effused may be either completely or partially reabsorbed and the pregnancy go on undisturbed.

2. But if the quantity of blood effused is considerable, the ovum is separated either completely or in great part, and is compressed by the voluminous coagulum; rupture of the membranes ensue, and abortion is the result.

3. The ovum may remain with the dead fœtus for a considerable time in the uterine cavity; the coagulum undergoes certain changes, which are also observable in extravasations in other parts of the body, and gives origin to the so-called flesh-mole. The effused blood (utero-decidual) becomes decolorized by rupture of the blood corpuscles and absorption of their coloring matter. The fibrine, Scanzoni supposes, becomes cellular tissue,

and in this way is established a communication between the ovum and the uterine wall, which renders further development possible. The chief seat of this carneous degeneration is the decidua-vera. The amnion undergoes little change, and may be found adhering to the inner surface of the chorion, containing within its cavity a quantity of bloody fluid, and in which will be found what remains of the embryo.

As regards the etiology of this strange obstetric condition, it can be summed up in the following: Syphilis, nervous shock of any kind, direct injury, twin pregnancies, endometritis, metritis, fevers, etc. The syphilitic poison interfering with normal nutrition in the parts concerned in gestation, as it does in other parts of the body, induces local retrograde tissue change (increased cell growth) which is inconsistent with the growth and life of the fœtus. Nervous shock and direct injury act by causing an extravasation of blood between the fœtal and maternal parts, and bring about death of the fœtus by a starvation process. This starvation process may also play some part in interrupted pregnancies occurring in very anæmic young women.

Now, gentlemen, that we understand what this obstetric condition—the subject of my paper—really is, and how it bears towards other conditions of a like nature, we will be able to form an idea of how very important it will be to diagnose correctly when placed in a position in which an error in our judgment may not only compromise our own professional reputation, but may interfere with the happy career of two innocent lives. In a case of this nature, the history of the patient and her size may have led either to no suspicion of pregnancy having commenced, or to those which may have been dissipated by the further history of the case. The important elements of suspicion may not have become apparent to the patient herself or to the physician. Here an error is extremely liable to occur, and that it has occurred and is liable to occur again I will show further on by relating a case in point.

I will first, however, bring to your recollection the occasion of my exhibiting before this Society last January a specimen of the so-called mummified fœtus or flesh-mole, supposed to have

been blighted at or near the eighth week, and that this specimen was accompanied by a placental mass, in which this fœtus was found enclosed at the time of its expulsion. The fœtus was one inch long, was perfect in all its parts, was firm in texture, and advancing to a dry state. The placenta was of the size of a normal placenta at about the fourth or fifth month. Its gross appearance showed advanced fatty and fibroid degeneration. Its fœtal surface was lined by chorion and amnion membrane. It had a large amniotic cavity filled to distension with dark coagulated blood, and containing within this cavity the fœtus before-mentioned. From the history of the case which I gave at the time, it will be remembered that the patient—a young married woman, who had already borne three children at full term—ceased to menstruate early in January, and had a sudden hæmorrhage in March on the occasion of a severe fright. That this hæmorrhage gradually ceased, and that—with the exception of a dark, non-offensive, intermittent discharge, accompanied by general bad health and reduction in abdominal size—nothing left the uterus until December following, when the fœtus and mass exhibited were expelled, as I have explained. At the meeting in question of this Society, I maintained that pregnancy took place in January and ceased in March at the occurrence of the hæmorrhage ; that the hæmorrhage was sufficient to cause death of the fœtus, but not of complete separation of the decidua and abortion ; that the fœtus was retained in the unbroken amniotic sac, and that the placenta underwent retrograde change and increase in size ; that expulsion of the uterine contents did not take place until December following, or *about eleven months of uninterrupted retention ;* and that uterine contraction was then probably excited by a flow of blood into the amniotic sac, which was found filled with a dark coagulum.

During the discussion which followed in connection with this case, some of my brother members took issue with me on one or two important points. And as I considered these points to be worthy of some special notice in regard to their medico-legal bearing, I have not lost an opportunity wherein I could obtain material to throw more light upon the subject. In doing so I

have been anxious to frame my actions in as neutral a way as possible, my only endeavor being to prove whether I was correct in advancing the views I did at that meeting, namely, *that it was possible for a woman, in whom pregnancy had ceased at or near the second month of gestation, to carry the dead fœtus and decidual mass in her womb for the remainder of the* 278 *days or more, without creating any further disturbance than my patient had suffered from.* In rebuttal of this statement, it was held—"That all such embryos were dissolved in utero. That if there was any separation from the uterine wall, then the embryo was rapidly dissolved. It was not believed that the specimen I had exhibited had been in the uterus anything like the length of time I had estimated. That my patient might have had one or more miscarriages in the interim, and that from the size of the specimen it was not thought to be more than five or six weeks in the uterus." *

This, gentlemen, was the condition in which the subject was dropped at the conclusion of the meeting. And the condition was so unsatisfactory to me, inasmuch that my own convictions in the case so far outweighed the doubts thrown upon them by my friends, that I felt it necessary to interest myself in obtaining further proof in the form of history of similar cases, and present them to you as a continuation of my reply. The first case I will relate is from the pen of Dr. Matthews Duncan. It is almost identical with my own case. It differs in one respect, namely, the sound was passed for diagnostic purposes at the seventh month, and uterine action was prematurely induced.

S. K., aged 31, married eight years; has had four children; no miscarriages. Had not menstruated for five months, when a bloody discharge began. After this had continued for three weeks she became an out-patient to the hospital. An examination now discovered a dilated heart with a mitral regurgitant murmur. There was dulness above the pubes for an inch, but nothing abnormal could be felt. Digital examination per vaginam discovered the brim of the pelvis occupied by a hard mass,

* *Can. Med. & Surg. Journal*, Feb., 1884, page 430.

with which the cervix is connected by continuity. The uterine probe was passed 3½ inches. About six hours after the use of the probe, pains began. After about eight hours of pains, a mass the size of an orange was expelled. Very little hæmorrhage followed birth of the mass. Patient rapidly recovered. The mass was found to consist of the entire ovum in a state of decomposition, except the liquor amnii, of which there was not a trace. The whole was a dirty-brown mass. The decidua and other membranes were rolled tightly round the fœtus. The fœtus was of the size of one of about two months growth. Beneath the chorion were several blood-clots of extravasation in various stages of decolorization. Dr. Duncan continues to remark that this is as fine a case of missed abortion as you could wish to see. *The length of retention after the death of the fœtus is five months.* Observe here that the membranes were entire; therefore, there was no putrefaction. The whole ovum was in a state of decomposition. Dead children, dead abortions in various stages of decomposition, are quite common; but putrid fœtus, or putrid abortion, is quite a rarity.*

The next case† consists of a specimen of a blighted ovum retained for a period of *twelve months* from commencement of pregnancy. The embryo perished at end of fourth month. Dr. West thought the case interesting, to show how we can err in such matters. The patient persisted she was pregnant, and the physician as strongly persisted *she was not*, that she was not only mistaken, but altogether so. The ultimate expulsion of the mass explained everything.

The next case‡ is related by Dr. Graily Hewitt, who exhibited a specimen of abortion with retention of fœtus and growth of decidua for *five months* after death of fœtus. The decidua was greatly thickened, the fœtus shrivelled up and having the size of a horse bean. The history of the case showed fœtus had ceased to live about third month of pregnancy, and was expelled *six months afterwards—i.e., at full term.* During all of this

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* *Medical Times & Gazette*, vol. ii, page 729, 1878.
† *Medical Times & Gazette*, vol. i, page 176, 1862.
‡ *Medical Times and Gazette*, vol. ii, page 621, 1861.

time there had been a dark fluid discharge occasionally passing which had been taken for menstrual discharge by the patient.

The next case was that of Prof. Dupaul,* who presented before the Academy of Medicine a specimen of a fœtus which was expelled after a pregnancy that had lasted between *ten and eleven months*. A young woman, who had already borne a child, ceased menstruating after Sept. 8th, and was delivered Aug. 14th of a child which had died at fifth month, and was expelled without the membranes having been ruptured, and exhibiting no signs of putrefaction. It is the first time that a pregnancy has occurred in Prof. Dupaul's practice which has been prolonged between ten and eleven months, the fœtus not being expelled for from five to six months after its death. This case, he observed, was only one to be added to many others proving that a fœtus, dead in utero, may sojourn therein for several months—providing that the membranes remained intact—without any injury to the mother. The fœtus on this occasion did not exhale the slightest smell of putrefaction, although it had remained in contact with air and water during 24 hours.

At a meeting of the Obstetrical Society of New York,† Dr. Watts exhibited a specimen with the following history: A lady, supposing herself to be six months pregnant consulted him. She menstruated last in the early part of July, followed by nausea and other signs of pregnancy. At a time when she considered herself two months pregnant she was out driving and met with an accident, injuring her abdomen on being thrown out of the carriage. Time went on without any unusual symptoms, and she now wished to know if she was pregnant. After an examination, he advised her to keep quiet. On January 7th she was suddenly taken with pains, and in two hours was delivered of the fœtus presented. Dr. Watts thought the fœtus was dead in the uterus for *four months*, and that it ceased to live at the second month.

At the Obstetrical Society, London, Dr. Edis exhibited a specimen of a shrivelled mummified fœtus and membranes. He

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* *Medical Times & Gazette*, vol. ii, page 283, 1881.

† *American Journal Obstetrics*, vol xiv, page 881, 1881.

said one fœtus was born alive in the seventh month of pregnancy. The other, as exhibited, apparently died in utero about two months previously.

Dr. Malins spoke of a case in which one fœtus had been born alive at the eighth month ; the growth of the other, expelled at same time, having been arrested at the fourth month. Cruveillier had illustrated the same condition. Such cases showed the power of toleration of the uterus, and were also interesting in their medico-legal aspect.

Dr. Henry Fruitnight of New York relates a very instructive case* in which a lady consulted him. In the latter part of April 1883, she menstruated for the last time. She soon developed the usual signs of pregnancy. She had already borne children. In August she received a severe fright, and in a day or two afterwards perceived a slight flow of blood from the vagina, unaccompanied with pain. The bleeding was intermittent in character for some time. Dr. Fruitnight made a digital examination in September, and diagnosed *partial separation of the placenta from the uterine wall*, and hæmorrhage as a result both into the placenta and externally. She was seen again in November, when she doubted she was pregnant at all. But she was delivered of a fœtus of about the third month gestation a few days afterwards. The form of the fœtus was flattened. It was friable. Its color was dark brown, and it was leathery and wrinkled, hence called a mummified fœtus. No evidence of putrefaction was apparent. The placenta was very hard, tough and yellowish. It showed traces of fatty and fibroid degenerations.

Dr. E. W. Knepper of Indiana relates a case† of twin pregnancy as follows : At the third month of gestation, after a carriage ride, hæmorrhage appeared, but after some rest, it ceased, and did not return until time of labor setting in at about the seventh month. A mummified fœtus of third month was now removed, and shortly afterwards a seven months child was delivered alive, which lived for several hours. In this case there was but one placenta for both living and dead fœtus, which is

* *American Journal Obstetrics*, page 50, 1884.
† *American Journal Obstetrics*, page 592, 1884.

unusual. There was no evidence of putrefaction, and this fœtus must have been in the uterus *four months* after it ceased to live.

Dr. H. J. Garrigues of New York relates a case* of a woman 30 years of age, married ten years, in her sixth pregnancy, and having had daily hæmorrhages for the past four weeks. No sounds were audible. Pregnancy with dead fœtus was diagnosticated. About a week later the bleeding ceased, and the patient felt well. About *nine months* after last menstruation, a fœtus and placenta, in one mass, were expelled ; they were perfectly fresh. The fœtus seemed to be at the end of fourth month, with partial arrest of development. Had hare-lip and cleft palate. The soft parts were much atrophied.

To make the subject fairly complete, I suppose I should say a few words about the best procedure to follow in the treatment of missed abortion. Generally speaking, we should abstain from interference until one of two accidents take place—*severe hæmorrhage* or symptoms of *septic infection*. In the case of severe hæmorrhage, we should wait long enough only to allow the patient to recover reaction from the loss of blood under the well applied vaginal tampon. Then clean out the uterus thoroughly, if sufficiently dilated ; if not, insert a tupelo tent for two or three hours and then operate.

The cases where sudden chills and elevations of temperature set in, with rapid pulse, every moment's delay is so much loss to the patient's chances of recovery and to our reputation. Pass in as large a tupelo tent as possible, remove it in a few hours, and thoroughly curette the uterus with the dull curette until every vestige of decomposed decidua has been removed. Then wash out the uterus with at least a quart of warm sublimate solution (1–2000), using a fountain syringe and tube having a return-stream. In regard to this procedure, the adage, "The man who hesitates is lost," was never more aptly applied than in this instance.

I am here tempted to give two cases which occurred to me some short time since, illustrative of one each of these very accidents. A woman, who had borne many children, but had

* *American Journal Obstetrics*, page 963, 1884.

never miscarried, had suffered for some months from the symptoms of an interrupted pregnancy. When I saw her she was in a state of syncope. The bedclothes and floor were saturated with blood—blood, in fact, was apparent everywhere. I hastily plugged the vagina with discs of cotton-wool saturated in a solution of alum ; then administered as rapidly as possible several hypodermics of brandy. I placed her body over the end of the sofa, with her head and shoulders downwards. She very soon began to recover consciousness and pulse beat. I then administered hypodermics of fluid extract of ergot, and left her. Returned some hours later, and found she had not recovered sufficiently to interfere. No more bleeding. Was shown a mumified fœtus of about twelve weeks' maturity, but could not find the placenta amongst the blood-clot debris. I left her again until next morning, when I removed the vaginal tampon. There was no more bleeding ; the uterus was quite small, the os closed, and I concluded the secundines had escaped with the fœtus. This woman did not recover the blood loss until after two months' confinement to bed.

The septic case occurred in a young married woman who had borne three full-term children, but had had several miscarriages within the last few years, in two of which I had emptied the uterus with the dull curette. On this occasion, after the first hæmorrhage, which occurred at third month, she expressed a wish to remain in bed until she had passed a certain time, which would tide her over the first half of pregnancy, and in this way she hoped to save her child and carry it to full term. So long as she remained quietly in bed the hæmorrhage would disappear, but on rising, even for a few hours, it would reappear. She continued this rest treatment for over two months, and as she noticed she was growing smaller instead of larger, she concluded the child was dead, and the sooner she got rid of it the better. In making an examination at this time, I found the internal os completely close to the finger. I told the patient that as there was no part of the uterine contents presenting, and no urgent symptoms requiring interference, I would wait until uterine action set in of its own accord. In about two weeks after this

I found the patient suffering from a severe attack of septic infection. I at once, through a Sims' speculum, passed into the uterus a large sized tupelo-tent; returned in three hours and withdrew tent, which was quickly followed by the escape of a mummified fœtus. There was little hæmorrhage. I began immediately with the curette and removed a very large decidual mass; so great was the extent of adhesion between it and the uterine walls that I had to remove it in many pieces, but never left her until I was perfectly sure not a vestige or shred remained in the uterus. I washed out the cavity with sublimate solution. She made a good recovery.

I could go on, gentlemen, adding case upon case relating to this subject had I the time to make a more extensive search in the medical literature of countries other than those in which I have; but I think it would be more likely to tire than add strength to your convictions of the truths I have advanced. And to bring the question a little nearer home to each of our individual selves, suppose, in a certain case, similar to the one connected with the specimen I exhibited to this Society, and to many of those I have to-night related to you, a woman missed two menstrual periods, and had a discharge of blood shortly afterwards, which was mistaken for the return of menstruation. The husband of this woman leaves home during this supposed menstrual flow, and does not return until the expiration of six months. Then shortly after his return his wife gives birth—so he is informed by his physician—to a two months baby. Imagine the physician's surprise when he is informed by the astonished husband that "that could not be, else the child is not his, he having been away from home during the last six months." The physician tries to explain, but has to admit that, from his experience and views on the subject of abortion, the said child could not have been more than eight weeks in the uterus, *because* "*if any separation had taken place from the uterine wall, then the embryo was rapidly dissolved.*" And upon this very unfortunate assertion alone, we can easily imagine how a painful case of litigation could ensue.

DIGITALIS.*

By JAMES STEWART, M.D.,

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Gentlemen,—The leaves of the digitalis plant contain three glucosides, each of which possesses active cardiac physiological actions. These are digitalin, digitaleïn and digitoxin.

In addition there is a fourth glucoside called digitonin destitute of any cardiac properties, but having an action very similar to saponin, the active principle of senega root. Digitalis leaves also contain a resin which closely resembles picrotoxin in its actions.

The active principles commonly known as Quévenne's and Nativelle's digitaline have been proved to be mixtures of the various glucosides above mentioned. None of the glucosides possess any advantage over a preparation of the leaves, and owing to the great difficulty in isolating them it is always preferable to use a tincture or infusion of the leaves.

Pharmacology.—There is no medicinal agent whose physiological actions it is more important that you should thoroughly understand than digitalis, for when used in proper cases and in proper doses it is capable of accomplishing a great deal of good. Although not, except in very exceptional cases, a curative agent† in the narrowest sense of that term, it is capable in many cases of not only giving great relief, but of prolonging life, frequently for very many months, and at times even for many years. The good that is obtained by mercury in syphilis, by salicylic acid in acute rheumatism, by quinine in malarial fevers is no more striking than the action which digitalis possesses in steadying and contracting an irregular and dilated heart.

Digitalis preparations have a disagreeable bitter taste, and when taken in large medicinal doses may give rise to nausea and vomiting and even to purging. The last effect, however, is very unusual.

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*Lecture delivered before the Materia Medica class, November, 1884.

†In cases of acute dilatation of the heart occurring as the result of anæmia it is a directly curative agent.

The active constituents diffuse readily into the blood, but what if any influence they exert on it is not known.

Action on the Circulation.—The effect of small medicinal doses (10 minims of the tincture every twelve hours) of digitalis is to make the heart beat with an increased vigour. The left ventricle especially beats more powerfully. Coupled with this increased vigour of the heart's contractions, there is a slight rise in the blood pressure, which has the direct effect of sending more blood to the ventricles and the indirect effect of further stimulating them in their contractions. If larger medicinal doses are administered, we have in addition to an increase in the effects already described, a slowing of the heart. The ventricles now beat not only more vigorously, but also slower. This slowing from full medicinal doses may amount to forty or even fifty beats per minute, but it is only in cases of cardiac failure that such a marked reduction takes place, and then only when the patient is confined to bed. Slight exercise readily quickens the pulse reduced by digitalis. That digitalis can slow the movements of a healthy heart to a considerable extent there is no doubt, but just to what extent it can do this, short of too high doses, I am not able to tell you. Some people's pulses are much easier reduced than those of others. The pulse of the feeble is much more easily reduced than the pulse of the robust. It has very little power in reducing the pulse of fever. If the temperature is high it practically may be said to have no influence at all. The reason of this will be referred to presently, when I come to discuss through what mechanisms it produces its different effects on the circulation. If the dose of digitalis be still increased, the vigour of the contractions becomes still greater and the slowing more decided until finally the ventricles come to a standstill in contraction.

A state of tetanus of the cardiac muscle is induced; this is quite different from the effects of aconite which also slows the heart, and finally brings it to a standstill in dilatation. No better method can be employed to demonstrate the action of digitalis on the heart than to take a frog and bring its heart to a standstill in dilatation by injecting aconite. When this has

happened, if we inject digitalis the distended ventricle slowly recovers itself, and soon returns to its normal condition. If we still continue injecting digitalis the systole becomes longer and the diastole less complete, especially at the apex which remains white and firmly contracted. This gradually extends over the whole ventricle, the heart finally comes to a standstill in firm contraction.

When either digitalis or aconite are given in such doses as to produce standstill of the heart, the pulse becomes quick and the blood pressure falls.

"In aconite poisoning the aortic pressure falls because the over distended ventricle is unable to contract upon its contents. Each contraction only sends a small quantity of blood from the upper portion of the ventricle. In digitalis poisoning the aortic pressure falls, because the over-contracted ventricle permits but little blood to get into it and can consequently send but little forward. The result is similar in both cases, but the cause in one case is just the reverse of that in the other."—Balfour.

The action of digitalis on the circulation in full medicinal doses may be summarized as follows:—

1. It makes the ventricles beat more powerfully.
2. It makes them beat slower.
3. It contracts the arterioles.
4. It raises the blood pressure.

These effects take place even after the vagi are divided and the spinal cord destroyed. It therefore follows that they are due (necessarily for the most part) to a direct action on the structures of the heart itself and on the vessels. This is further confirmed by the fact that when digitalis is directly applied to the isolated frog's heart it slows and renders its movements more powerful.

The increased vigour of the contraction is due to a stimulation of the intra-cardiac motor ganglia, while the slowing is principally brought about by stimulation of the peripheral terminations of the vagus in the heart. Digitalis also has a stimulating action on the vagus centre in the medulla.

Dr. Lauder Brunton has quite recently shown that the reason

the pulse of fever is not slowed by this drug is that the increased temperature has a paralyzing effect on the inbibitory influence of the vagus on the heart. The cause of the contractions of the arterioles has been a very much disputed point, and even yet it is not definitely settled. Some maintain that it is owing to stimulation of the central vaso-motor centre or centres, while others ascribe it wholly to a stimulation of the vaso-motor fibres in the blood vessels. That the latter is a factor in the production of the contraction there appears to be no doubt, but that the former is the principal agent in the causation seems very probable.

It follows as a result of the increased contractions and the marked resistance to the blood stream by the contracted arterioles, that the aortic pressure is increased.

The quickening of the pulse brought about by poisonous doses of digitalis is due to paralysis of the inhibitory fibres of the vagus and the final fall in the blood pressure is due to the arteries being imperfectly filled, owing to the contracted state of the heart allowing but little blood to get into it.

Action on the Temperature.—It is generally admitted that digitalis has some influence in reducing a febrile temperature. It has been experimentally shown by Ackermann, that after it raises the pressure in the arteries, it lowers the temperature in the vena cava, and at the same time raises the temperature of the external parts. It diminishes the internal temperature, and increases the external or surface temperature. It is only antipyretic from its action on the circulation. It is not antipyretic in the same sense that quinine and salicylic acid are antipyretics.

Action on the Nervous System.—Any effect produced by digitalis on the nervous system is indirectly brought about by its influence on the circulation. From full medicinal doses it is not uncommon to hear patients complain of headache, a band like feeling around the forehead, dizziness and also of colored vision, together with a sense of faintness, nausea or even actual sickness.

Action on the Secretion of Urine.—Digitalis has very little influence in increasing the quantity of urine in health, but in

cardiac disease attended with dropsy, where there is a diminished outflow owing to the failing heart, it then acts powerfully as a diuretic. The diuretic power is solely due to its influence on the blood pressure. In order to bring about the full diuretic effects of digitalis it is necessary to give it in full doses. The effect of small and even of moderate doses is to increase the general blood pressure, including the pressure in the arterioles of the kidneys. While the general pressure is increased the quantity of urine is not increased. After, however, a certain quantity of digitalis has been introduced into the blood, the pressure in the arterioles of the kidneys gives away with the result of a rapid and great increase in the quantity of urine. This may last for several days, depending on the amount administered. If the drug is still continued, the fall in pressure which commenced in the arterioles of the kidney, extends throughout the whole arterial system with the result of a marked decrease in the secretion of urine.

It follows from this that there are three stages in the action of digitalis on the arterioles of the kidneys, and each separate action is attended by a difference in the amount of urine secreted.

1. From the action of small doses (tonic) we have a general increase of the arterial pressure. This stage is not attended by an increase in the quantity of urine.

2. From the effects of large medicinal doses when continued for two or three days, we have a fall in the arterial pressure in the kidneys, while the increased pressure throughout the rest of the arterial system remains. The result of this action is a great increase in the quantity of urine.

3. When the drug is pushed until the fall in the arterial pressure which commenced in the kidney arterioles has extended so to take in the whole of the arterial system, there is a marked decrease in the quantity of urine.

Uses.—The great use of digitalis is in cases of heart failure, especially in cases of heart failure occurring as the result of organic changes in the valves of the heart. It is also useful before actual or pronounced failure has set in. If given in proper doses it is able to delay, often for a long period, the appearance of failure.

It makes but little difference what particular orifice may be narrowed or leaking, whether it is the mitral or aortic, digitalis is indicated. It certainly is more effecacious in some conditions than others, but in a general way the truth of the statement that it is indicated in all forms of heart failure is practically correct.

To have clear ideas as to what digitalis can do in restoring a failing heart it is necessary that you should understand what cardiac failure means, and how it is brought about as the result of a valvular lesion.

I have here the heart of a man, who died a few days ago from the effects produced by incompetence of his aortic valves. Through the kindness of Dr. R. L. Macdonnell he has been under my care at the University Dispensary for the diseases of the nervous system for the past seven months. During this time I had repeated opportunities of observing the marked relief that he obtained from digitalis. I will first point out the differences between this heart and a normal heart, and afterwards show how these differences came about, and finally I will refer to the influence digitalis has in preventing and relieving such changes, and what particular influence it had in relieving the symptoms and delaying the end of the case under consideration. By adopting this method I think I can make the actions and uses of digitalis plain to you.

The man at the time of his death was 35 years of age. Since his fifteenth year he had five distinct attacks of acute rheumatism. He distinctly remembers that his "heart was affected" during the first seizure, but it never gave him any trouble until four years ago. This was shortly after his fifth and last attack. We have here a period of twenty years during which he undoubtedly had a heart lesion, but it is only during the past four years that he suffered from the effects of this lesion. The compensation during the first sixteen years of the life of the diseased heart was so perfect that it gave rise to no marked symptoms. Four years ago, however, this compensation began to fail, and we have from this time onwards a history of all that results from such failure.

You see that the aortic valves are badly deformed and their surfaces studded with a great number of vegetations.* You can readily understand how incompetent these valves were during life to fulfill their functions of closing the aortic orifice. On further examining the heart we find it greatly enlarged, and that this enlargement is due for the most part to hypertrophy of the muscular fibres of the left ventricle. In addition to an increase in the thickness of the ventricular walls, we have also a great increase in the size of its cavity. The left ventricle is both hypertrophied and dilated. For our purposes there is no need of noticing any further changes, with the exception of dilatation of the mitral valve, present in this heart. I will now endeavour to explain how these different pathological conditions were induced.

The thickening, the vegetations and the deformity of the aortic valves were caused by rheumatic inflammation of their structures during the first and probably also during the subsequent attacks of acute rheumatism. As a result of the incompetency of the valves, the left ventricle received during its dilatation blood from two sources, in place of from one—from the aorta as well as from the left auricle. The result was an over-filling of the ventricle. The immediate result of the over filling was dilatation of the ventricular cavity. This dilatation, however, could only for a very short time relieve the altered conditions. If it were all that had taken place the man would not have lived at the longest more than a few weeks. What did take place was an hypertrophy of the muscular fibres of the left ventricle, and it was this increased power of the ventricular muscle that enabled the circulation to be carried on in spite of the leaking valves. The causes of the three prominent changes in the heart are plain. They may be thus summarized: 1st. The valvular distortion, &c., is the the result of the rheumatic inflammation of the endocardium. 2nd. The dilatation of the ventricle is owing to it receiving an undue supply of blood into its cavity. 3rd. The hypertrophy is the result of

*About a year ago he was suddenly seized with left hemiplegia, due as was proved at the post-mortem by Dr. Sutherland to plugging of his right middle cerebral artery by an embolus carried from his warty aortic valves.

the increased efforts made by the heart to overcome the dilating powers of the column of blood. We have finally to enquire, what brought about the cardiac failure in this heart? Why did the hypertrophied ventricle fail at last to propel the blood forward? In all cases like the one we are considering there arrives a time when the heart is no longer able to do its work. A very frequent reason of this failure is a degeneration of the muscular structure as a result of the long continued over-work, or it may be brought about acutely as the result of a severe illness, especially when attended by a high temperature. In the heart before us, the prominent factor in bringing about failure was not degeneration of its muscular structure, for on closely examining it you will find its walls firm, and not, at least to the naked eye, the seat of advanced fatty degeneration. The main factor in the production of the failure was a purely physical one. In cases of aortic incompetency dilatation is ever slightly in advance of hypertrophy. Compensation is never so perfect that a little blood does not regurgitate, and as there is necessarily a limit to hypertrophy, so there necessarily arrives a time when further hypertrophy is not possible. The result is that heart failure sets in. There are two periods in the life history of a diseased heart such as this where digitalis would be useful. The same is true of any valvular lesion, but it is especially true of mitral valve lesions.

Digitalis is useful during the period of compensation, but it is especially useful after compensation has failed. It is very exceptional to find a case of any valvular lesion where the compensation is so perfect that it would not be benefited by digitalis. During the compensation period it should be given only in tonic doses, that is in quantities just sufficient to slightly increase the vigour of the ventricular contractions, but not large enough to slow the pulse. Given in tonic doses it aids the ventricle in better overcoming the ever acting dilating force of the column of blood. It therefore delays the inevitable cardiac failure.

The other period where digitalis is of use, is when compensation fails—when cardiac failure has set in. The contractile

power of the heart is diminished, and when extreme only the upper portion of the ventricle empties itself, just barely enough blood is poured out to sustain life.

The first effect of heart failure is diminution in the aortic pressure, and this at once shows itself in diminution in the amount of urine excreted.

When compensation fails it may be restored by the judicious use of digitalis so completely that it will last for several years.

In cases of aortic incompetency, what we want to produce when compensation fails or is about failing, is sufficient contraction of the ventricle to overcome the dilating powers of the column of blood, and this we can accomplish if the case is not too far advanced. To effect this, however, it is necessary to give the drug in what is called cumulative doses. By this is meant the administration of a second dose before the effects of the first have passed away, and continuing the administration in this way until certain definite effects are brought about. Nothing but the greatest good can arise from the use of digitalis in such quantities, provided its actions are closely watched, and its administration suspended when the symptoms presently to be described make their appearance.

Many practitioners dread giving digitalis in full medicinal doses. The idea is not uncommon, that it may act in an explosive sort of way and bring about that which it is intended to combat. Now, there is nothing whatever of the mysterious in its actions. When given in a scientific manner its actions can be foretold with a certainty, not excelled by that of any medicinal agent. If there are some practicioners who have a dread of this drug, there are on the other hand others who have not a sufficient fear of it. Any one who has witnessed the reckless way in which it is sometimes given to advanced cardiac cases, must be convinced that not all cases of cardiac diseases die from the effects of their disease, but that some deaths are indirectly, if not directly, due to the too lavish or too long continued use of this agent. The mistakes of the unscientific physician are hidden even from himself in these cases.

So long as digitalis increases the quantity of urine it is quite

safe to proceed with its administration, but when the amount commences rapidly to diminish then it is a sign that the increased blood pressure is giving place to a diminished pressure and that the saturation point has been reached. If in spite of this warning the drug be continued, the quantity of urine will still continue to decrease, until finally it becomes almost completely arrested. The pulse from being slow becomes weak, frequent and irregular, and the heart sounds are reduced to a "toneless tic-tac." When the condition of things just described has been reached, you can readily understand that a few more doses are all that is necessary to bring the heart to a standstill.

Digitalis should never be pushed to the extent of quickening the pulse after it has considerably slowed it. A preternatural slowing of the pulse should be as much a warning of saturation as the dimimished quantity of urine. The occurrence of nausea or vomiting after the physiological effects are induced should also be taken as a symptom denoting that the safe saturation dose has been reached.

A diminution in the quantity of urine excreted, an unusual slowing of the pulse and the occurrence of nausea or vomiting, are then the symptoms that indicate that the point has been reached, past which it is not safe to go. Up to the production of these symptoms, nothing but good is obtainable. The first symptom usually of saturation is the slowing of the pulse, and it may be even twenty-four or forty-eight hours after the drug is stopped before its diuretic effects are manifested. It may take four or even five days to bring this about. It is, however, more common to find that the urine commences to increase in quantity during the third day. The duration of the diuresis depends solely on the dose.

The changes for the better that are effected by digitalis in persons with irretrievably damaged hearts is very striking. The urine from being scanty and high coloured becomes copious and pale. The dropsy disappears. The breathing becomes easier. The pulse from being weak, frequent and irregular becomes strong, slow and regular. These marked results are, however, only obtainable from the use of cumulative doses.

Now as to the quantity of digitalis necessary to bring about saturation. You should always remember that different persons vary considerably in their susceptibility to its action. Forty minims four times daily for a period of three days will, in the majority of cases of heart failure from valvular disease in adults bring about one or more of the saturation symptoms. That is, a quantity slightly short of an ounce of the tincture will, in divided doses, bring about saturation in three days. In exceptional cases it is necessary to give even larger doses before the desired result is obtainable. One drachm of the tincture four or even six times in the twenty-four hours may be necessary.

Tonic doses should, on the other hand, not exceed twenty minims of the tincture in the twenty-four hours. When these quantities are given the only noticeable effect is a slight increase in the vigour of the heart's contractions together with an appreciable rise in the aortic pressure.

I will now give a brief account of what digitalis did for the man whose heart you have been examining. When he came under observation seven months ago he was suffering from the symptoms of pronounced heart failure. He was dropsical, short of breath and passed but a small quantity of urine. His pulse was very rapid and low in tension. He was troubled with a profuse serous diarrhœa, and his stomach was in a catarrhal condition. Without confinement to bed, twenty minims of the tincture of digitalis four times daily for four days, caused a marked increase in the secretion of urine, with the subsequent disappearance of the dropsy. He was able to breath much easier. His diarrhœa was arrested and his appetite greatly improved. He expressed himself as feeling greatly relieved, and compared to his former distressing condition he was comfortable. He continued in this amended condition for four or five weeks, all the while taking digitalis but only in tonic doses. The ever progressive heart failure even in spite of the support from the digitalis, shewed itself again, but on this occasion in a much more pronounced form. As before it was attended by the usual symptoms, but on this occasion they were present in an aggravated degree. They indicated such a very serious rupture of

the compensation that death appeared to be imminent. Rest in the recumbent position, and the tincture of digitalis in doses of two drachms daily for four days made another marvellous change for the better in his condition. The dropsy again rapidly diminished, but never entirely disappeared. His breathing became much easier and his pulse fuller. So much did he improve that he was once more able to go about. The improvement did not on this occasion last more than two weeks. Once more all the symptoms of advanced cardiac failure made their appearance. He was now removed to the General Hospital, where he remained until his death, which occurred a few days after his admission. The immediate cause of death was an "infective" endocarditis. Even after his admission into the hospital he experienced relief from digitalis, ordered him by Dr. Ross, the attending physician.

I think I have laid before you evidence enough to prove the inestimable value of digitalis in cardiac therapentics. It is not alone the power it has of prolonging life that should make us prize it highly, but also its marked efficacy in relieving some of the most distressing symptoms that can afflict humanity. The present knowledge that we possess of the actions of digitalis was only acquired by slow degrees. Its scientific application in the treatment of heart failure was not understood until the pharmacology of the drug had been worked out by experiments on the lower animals. If vivisection had done nothing more than give us digitalis, it could be truly said of it that it had accomplished a great deal. We are principally indebted for our present knowledge of the actions of this drug to Traube and Schmiedeberg of Germany, G. W. Balfour of Edinburgh, and Lauder Brunton of London. Brunton's and Balfour's names deserve especially to be remembered, the former for the elaborate and painstaking experiments by means of which he demonstrated its true physiological actions, the latter for showing us how to use it to the best advantage in cases of cardiac failure.

Mode of Administration.—In prescribing the tincture of digitalis it is as a rule better to give it alone. Its combination with an iron preparation forms not only an unsightly looking

mixture, but it is much more apt to disagree with the stomach than when given alone. If, therefore, iron is indicated in a cardiac case, and it frequently is, it is advisable not to combine it with digitalis, but to order it in a separate mixture.

Powdered digitalis can be prescribed in the pilular form. There is a famous combination known as Baly's pill, which is much relied upon by many physicians to remove a dropsy. The following is the composition of this pill :—

℞ Pulv. Digitalis
Pulv. Scillae
Pil. Hydrarg āā gr. i.
S. One pill two or three times daily.

The use of the so called active principle, Nativelle's or Quévenne's digitaline, is not to be recommended when we wish to bring about saturation symptoms, on account of the uncertainty of its action. It, however, can be employed with safety to produce the tonic effects of the drug.

QUARTERLY RETROSPECT OF SURGERY.

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Flat-foot.—A very common and troublesome deformity is one which is called talipes valgus (planus), or flat-foot. This deformity is due to the falling down of the inner longitudinal arch of the foot. The posterior pillar of this arch is formed by one bone, the os calcis, and the anterior by several, viz., the scaphoid, three cuneiform, and three inner metatarsal bones with their joints. The keystone of the arch is formed by the astragalus. The arch is maintained in position principally by ligaments. The head of the keystone bone is prevented from sinking down by a ligament, the calcaneo-scaphoid which connects the anterior part of the os calcis with the under part of the scaphoid, and also by its connection with the os calcis by the strong calcaneo-astragaloid ligament. The arch is also preserved in some degree by the other ligaments holding the bones together and the plantar fascia.

Now if the astragalus or key-bone descends from any cause, the plantar arch is lengthened and the foot is flattened, and the more the bone descends the more the foot is flattened and the weaker it becomes, because less favourably arranged for bearing weight. The cause of the descent of the astragalus is the stretching of the ligaments which support it and the arch of the foot. Now there are two periods of life when flat foot is most likely to come on. 1st, In infancy; if weakly children be put on their feet too early, the ligaments are stretched, the arch is lengthened, and the astragalus descends in an inward direction. 2nd, At about the age of puberty, when the body increases rapidly in size and the various fibrous structures are softened and stretch easily, the arch of the foot is frequently destroyed, especially if individuals at this critical time are obliged to carry heavy weights or to stand for long periods.

When the arch of the foot is lost, the patient in walking loses his elastic step, the foot is raised as a whole, the spring of the toes being lost. The continual stretching of the ligaments and the pressure of the head of the astragalus on the muscles and nerves of the sole, of course, would also cause considerable pain, for which the individual consults a surgeon. The pain is often, especially after walking, very severe. It is also naturally worse at night than in the morning. In the early part of the day the arch is partially preserved by the sole and flexor muscles, when these get tired out the ligaments are put on the stretch and the pain commences.

In severe cases, as lately pointed out by Prof. Ogston (*Lancet*, Jan. 26th, 1884), a still further deformity ensues:—The heel becomes raised, giving the foot what he calls a canoe shape. This is due to the action of the calf muscles tilting the os calcis up, as owing to the flatness of the foot they cannot raise the foot on the toes and so throw the body forwards. The astragalus becomes altered in shape. The changes are confined principally to its head and neck, the neck is much shortened owing to pressure on the head, whose upper and outer part is pressed against the scaphoid and hence an abnormal foot is formed. Mr. J. Symington (*Jour. Anat. and Phys.*, October,

1884) has lately fully described the deformities existing in flat-foot, and he gives results of a dissection of one examined by himself. I refer my readers, who wish for further information, to his paper and the works of C. Hueter and G. Hermann von Meyer. Heretofore the treatment of flat-foot has been very unsatisfactory. In recent cases, prolonged rest, especially the avoidance of standing still and carrying weights may, with tonics, prove of some use. The wearing of flat-heeled boots, with a steel spring or waist to the boot, and an inside pad of rubber or leather to support the inner side of the foot is often beneficial.

Mr. Walsham (*Lancet*, Jan. 26th, 1884) describes a useful kind of valgus boot. He fixes a broad rubber band to the inside of the "uppers" of the boot on the outer side; this crosses under the sole of the foot opposite the calcaneo-scaphoid articulation; it is then carried up on the inner side of the foot to just above the top of the boot, and then by means of a leather strap and buckle is secured to the calf piece. He uses a valgus pad also which he slips over the rubber band. Some surgeons advise the use of the actual cautery to inner side of foot to hasten the shortening of the ligaments; of this method of treatment I have had no experience.

Mr. Willett, (Vol. XVIII., St. Barth. Hosp. Rep.), in severe cases advocates the forcible replacement of the bones of foot under an anæsthetic, and then placing it in plaster of Paris in a state of extreme inversion.

In some very severe cases where there is alteration in the shape of the bones and the patient cannot afford to undergo a prolonged course of treatment, other measures are necessary, and Professor Ogston, of Aberdeen, (*Lancet*, Jan. 26th, 1884), has devised a new operation for such cases. He advises cutting down on the astragalo-scaphoid joint, removing the articular surface of scaphoid and astragalus, and after placing them in good position, endeavouring to get bony union between them. He keeps the bones in position by ivory pegs. This is, in fact, an excision of the astragalo-scaphoid joiut, and he advises it to be performed with strictly Listerian precautions. Prof. Ogston

has performed this operation seventeen times; the patients, without exception, remained free from fever during treatment. They all were benefitted by the operation, and in most of them bony ankylosis and a painless arch were obtained. Most of them resumed their laborious occupations.

Dr. Hermann von Meyer (*Studien über den Mechanismus des Fusses*), Professor of Anatomy at Zurich, after a careful examination of the normal and of the flat-foot, anatomical as well as clinical, comes to the following conclusions which, as may be seen, are not in agreement with views generally accepted. He says that flat-foot does not depend on destrnction of the arch of the foot, but on a valgus position of the foot, and chiefly of the oscalcis. He holds that deformity is not due to relaxation of the plantar ligaments, but depends rather on exaggerated rotation inwards of the astragalus, and on subsequent changes in the plantar bones due to atrophy, resulting from mutual pressure. The fore part of the foot is also turned upwards and outwards.

Mr. R. Clement Lucas (*Lancet*, March 3rd, 1884), says that the flat foot and weak ankles of puberty are always associated with rickets and albuminuria. This condition is characterized by relaxed ligaments and also some enlargement of the epiphyses. He also states that this form of rickets with albuminuria is invariably associated with masturbation. He remarks that the absurdity of treating such cases merely by mechanical appliances, &c., when there is an underlying habit causing a general constitutional disease, is very obvious. He never treats a case of flat-foot, knock-knee, or lateral curvature, without first examining the urine, and in the majority of cases he finds that albumen is present. This condition in boys, Mr. Lucas says, is most frequently seen about 15 years of age. Mr. Lucas gives two cases in support of his theory. There may be a modicum of truth in what Mr. Lucas says, but his assertion as to the cause of flat-foot and knock-knee is altogether too sweeping, and will not be accepted without much more evidence than is offered by Mr. Lucas.

Osteotomy for Genu Valgum.—Dr. Wm. MacEwen of Glasgow read a paper on this subject before the International

Medical Congress, held in Copenhagen in August last. This paper has been published in the *Lancet* of Sept. 27th. Dr. MacEwen first invited an expression of opinion on the following points: 1, The various methods of performing osteotomy for genu valgum and their comparative qualities. 2, The results of these operations. 3, Does the deformity return after it has been rectified by osteotomy? and if so, under what circumstances?

(1) As to the first point, should the intra- or extra-articular method be adopted; and should the tibia or the femur be selected for the operation—in other words, should Ogston's operation and its modifications or the supra-condyloid method be preferred on the femur; and if the tibia be selected, should Billroth's or Schede's operation be performed? and, lastly, which of these four operations is the preferable one?

(2) The results of the operation—Dr. MacEwen presented a table of 1,118 cases, or rather limbs, operated on by 37 surgeons. Eleven surgeons used Ogston's operation on 525 limbs; twenty-two surgeons used MacEwen's method exclusively and eleven occasionally; these 33 surgeons have operated on 580 limbs. In the other limbs operated upon, Chiene's and Schede's methods have been used. In these cases the accidents during the operation have been as follows: Hæmorrhages in two of McEwen's, thirteen of Ogston's, and one of Chiene's. The knife was broken off in the joint in one of Ogston's. Thirty-four out of the 37 surgeons used spray and other Listerian precautions, while three conducted the operation by the open method. Thirty-two cases of MacEwen's operation afterwards suppurated, eight cases of Ogston's, and one of Chiene's—that is, 41 out of 1,118 have suppurated. Five fatalities after McEwen's operation, though some of these were not directly due to the operation,—so there were 1,113 recoveries out of 1,118 cases.

With regard to the utility of the limb, in seven cases there was ankylosis, and in two (Ogston's) bow-legs resulted; all the others were good.

(3) Relapses—In seven cases relapses occurred; in one of Mr. Chiene's cases amputation had to be performed from the onset of gelatinous degeneration of the synovial membrane.

The average duration of the treatment was three months.

Dr. MacEwen then gave the statistics of his own operations. He had, up to July 31st, operated on 804 limbs in 490 patients (ranging in ages from 7 to 46 years), making 820 osteotomies in all for genu valgum. The supra-condyloid method was performed alone, in 810 limbs. The operations were all conducted under the spray and with strict Listerian precautions. In 8 cases suppuration took place. For the last three years no case has suppurated. Two of the patients died. Dr. MacEwen stated that he had performed osteotomy 1800 times in 1267 limbs, on 704 patients, with five deaths—two from diphtheria, one from tubercle, one from pneumonia, and one from enteric fever. In all the recoveries, there was improvement in the form, strength and utility of the limbs. Only two cases relapsed. The average duration of treatment was six weeks in the splints and two in the wards afterwards. The combined statistics of Dr. McEwen's operations and those of other British surgeons for genu valgum give 1384 limbs operated on, with ten deaths *after*, though not all *from*, the operation.

In the discussion which followed the reading of the paper, Prof. Ogston of Aberdeen said he had not altogether given up his own operation, because he was most familiar with it, and did not like to throw it over altogether; but he had for some years past told his students that Dr. McEwen's operation was the best, and he wished to make to that meeting of the congress a similar announcement. He would advise every person who wished to osteotomise for genu valgum to adopt it in preference to his (Dr. Ogston's) own.

Prof. Chiene of Edinburgh could not go the length of Professor Ogston in throwing up his operation altogether. Still, on his return to Edinburgh he would give Dr. MacEwen's a fair trial.

Prof. Schede (Hamburg) accepted Dr. MacEwen's operation; in fact, in most cases he had substituted it for his own. Still, he thought that in many cases the tibia was involved; he therefore, in these cases, performed his own operation.

Mr. Bryant (London) said there was now no doubt that MacEwen's operation was the best one.

Dr. Robin (Lyons) showed an apparatus whereby MacEwen's operation could be performed without a wound.

[For the benefit of those readers who have not kept themselves posted as to the various operations for genu valgum, I might mention that Ogston's operation consists in obliquely chiselling off the *inner condyle* of the femur and then forcibly straightening the bent limb and fixing in splints. MacEwen's operation is that of dividing with a narrow chisel the *shaft* of the femur above the condyles, from the inner side, just above the epipysal line, then straightening it forcibly, and fixing it in the corrected position for some six weeks.]

It certainly is very creditable to Prof. Ogston that he should so gracefully acknowledge that MacEwen's operation is a better one than his own. The other speakers made the same acknowledgment, though they did not so completely embrace MacEwen's operation as did Prof. Ogston. There is no doubt in the minds of the great majority of surgeons that MacEwen's operation is the best and simplest, as well as the safest. He himself has been marvellously successful with it. In the hands of others, owing, as Dr. MacEwen remarked, to his directions not being exactly carried out, accidents have happened. Several cases of death from hæmorrhage and from ulceration of a splinter of bone into the artery (popliteal) have lately been reported in the medical journals. Dr. MacEwen lays great stress on the direction of the cut, which should be from behind, forwards and inwards, for if the direction be from within, outwards and backwards, the popliteal might be divided. In Canada, this operation is not often called for, people not being so subject to rickets, owing to the better methods of living. Rickets are seen often enough among the French Canadians, but they are unwilling to have operations performed, or to have any interference with what "Le Bon Dieu" has sent them In large centres like New York, the operation has frequently been performed, especially on the members of the foreign communities, such as the Italians, who are very subject to rickets.

Dr. V. P. Gibney, at a recent meeting of the New York Academy of Medicine (*Phila. Med. News*, Dec. 6, '84) read a

paper on *The Surgical Management of Rachitic Deformities of the Lower Extremities*, in which he said, in cases where osteotomy was necessary for genu valgum, MacEwen's operation is the only one that should be performed. Many of the surgeons who discussed the paper spoke most favorably of MacEwen's operation.

Tracheotomy for Croup.—Dr. Cocks (*Archives of Pediatrics*, Vol. I, No. 1) of New York relates his experience of 15 cases, which were all performed at the patient's houses, with no more skilled nursing than was afforded by patient's relatives. Eight of the 15 cases recovered. Two died on the first day, two on the second, two on the third, and one on the fourth day. Dr. Cocks or his assistant remained with the patient from three to six hours after the operation, and during that time instructed the amateur nurse in the conduct of the case. The room temperature was maintained at 80°F., a warm sponge was kept over the tube, and steam spray was kept constantly going. The nurse was directed to take out the inner tube every 15 minutes, soak it in hot water, and pass a muslin rag through it. A feather is used to clear the outer tube. After the third day the tube was taken out twice daily and cleaned. The tube was finally removed on the sixth to the tenth day.—*Lond. Med. Record*, Aug., '84.

Splenectomy.—At the thirteenth congress of German surgeons Von Hacker of Vienna exhibited a lymphoid sarcoma of the spleen, which had been successfully extirpated by Billroth. Before removal, the oval tumor measured ten inches vertically and more than seven inches transversely. On median laparotomy, the convexity of the tumor was found to be free from attachments, but the omentum and a coil of intestines were adherent to the hilus. The splenic artery and vein were divided between two ligatures, and rather more than an inch and a half of the adherent tail of the pancreas required removal with the thermo-cautery. This is the first splenectomy ever performed for sarcoma.

Credé, at the same congress, exhibited a man whose spleen he had removed two years and a half previously for a large cyst. In this case, as in the preceding one, there had been no enlarge-

ment of the thyroid or lymphatic glands, and the man was apparently quite well.

In the discussion which followed, Czerny of Heidelberg stated that the woman from whom he had removed a movable hypertrophied spleen five years previously was still alive, and exhibited no changes in the blood or in the organs above referred to. Hence we may infer that the spleen is not absolutely essential to life, and that its functions, after extirpation, is assumed by the medulla of the bones and other lymphatic organs.—*Phila. Med. News*, Aug. 23rd, 1884.

Operative Treatment of Malignant Affections of the Rectum.—At the recent meeting of the International Medical Congress, held at Copenhagen, Prof. Esmarch read a paper on the above subject, in which he laid down the following propositions:—1, In the treatment of cancer of the rectum, the same principles hold good as in the treatment of cancer of other parts of the body. 2, Extirpation should be as early and as complete as possible. 3, The more the surrounding healthy parts are removed with the diseased, the greater reason there is for hoping that recurrence will not take place at all, or will be long delayed. 4, Experience teaches that early and thorough removal may be followed by permanent recovery. 5, As, in cancer of the rectum, the lymphatic glands are secondarily affected at a comparatively late period, operation may be followed by permanent success when the disease has lasted some time, and has become extensive. 6, The prognosis in regard to the return of the disease is good, in proportion to the slow development of the new growth, the delay and the appearance of distressing symptoms, and the completeness of the operation. 7, The simple cylinder-celled cancers, which proceed from the more superficial layers of the mucous membrane, generally give a better prognosis than the forms with small alveoli and the gelatinous forms, which more rapidly enter the deep submucous layers. The greater the disposition to the deposition of gelatinous degeneration, the more malignant the case. 8, Extirpation of a cancerous nodule from the wall of the rectum is sufficient only when the nodule is well circumscribed and movable, and when only a part of the wall of

the rectum or anus is implicated. 9, In all other cases, amputation of the rectum beyond the points of growth is indicated. 10, The entire rectum, as far as the sigmoid flexure, may be removed with good results. 11, The principal dangers of the operation are—*a*, hæmorrhages; *b*, acute, purulent and ichorous inflammation of the connective tissue. 12, These dangers are to be combatted (*a*) by very careful hemostasis during the operation; (*b*) by very careful primary disinfection and provision for the free escape of the secretions of the wound (by drainage and the avoidance of cavities). 13, In amputation of the rectum high up, opening of the peritoneum is unavoidable, but peritonitis does not generally follow if the opening be at once closed by suture under strict antiseptic precautions. Drainage of the peritoneal cavity is indicated only in exceptional cases. 14, The progress of operative skill has essentially diminished the dangers of the operation, the death-rate having fallen from 50 to 20 per cent., and even lower. 15, The functional disturbance following amputation of the rectum is slight in comparison with the distress caused by the cancer. Incontinence of fæces is not complete, especially when the external sphincter has not been removed. Systematic cleanliness and the use of a suitable apparatus for closure commonly relieve the difficulty. 16, Resection of a portion of the intestinal tube in its whole circumference, followed by suture of the two ends of the intestine, is not to be recommended, since the lower portion of the intestine generally sloughs. It is better to preserve the external sphincter and fasten the end of the amputated rectum to the lower edge of the wound. 17, Extirpation of cancer of the rectum is, in all cases, rendered easier by dividing the posterior wall of the gut as far as the coccyx. Removal of the coccyx is generally unnecessary.

In the discussion which followed, Prof. Verneuil (Paris) stated that he had done his first colotomy thirty years ago, and his first extirpation fifteen years ago. He found that removal of the disease was impossible. He found that division of the cancerous stricture removed all complications, and gave all the advantages of colotomy. The whole length of the stricture

must be split. The incision was made from the tip of the coccyx by a thermo-cautery plunged in to meet the tip of the finger, hooked above the stricture. Through this channel, by a cannula if necessary, an écraseur chain was passed, and the rest of the division was completed. No blood was ever lost, and the symptoms at once ceased. No deaths followed.

Prof. Trelot (Paris) denied the advantage claimed for rectal extirpation, and pointed out the rapidity and malignity of recurrence.

Mr. Sampson Gamgee (Manchester) preferred the operation of inguinal colotomy.

Prof. Volkmann (Halle) observed that colotomy, even in Mr. Bryant's hands, was a dangerous operation, and that the statistics of extirpation were better than those of colotomy according to Bryant. Cancers in the rectum had little tendency to infiltrate early and recur soon. Even in desperate cases he had had no return under long periods, in one case not for ten years. The results of excision of the rectum had improved, and would go on doing so with improved methods. Asepsis and disinfection were normally powerful when the peritoneum was not opened, but when this was opened the dangers were great and cleansing difficult. But dangerous as extirpation was it was not so bad as colotomy, discomfort being hardly felt except in diarrhœa. The selection of cases, he said, was also important, and he did not operate on any case he could not reach the upper end of the disease by bi-manual exploration under anæsthesia, the incision should be both forwards and back to the coccyx, the anus alone being left. No attempt should be made to unite the upper with the lower end, which should be stitched well down and the cavities at the side thoroughly drained.

Prof. Kuester (Berlin) said that in extirpation he always applied sutures when the peritoneum had been opened. Cauterization was a proceeding from which good results were got in most of the cases where a permanent cure could not be expected. He would select either this or extirpation, very seldom colotomy.

In a paper on the "Statistics and Operative Treatment of

Cancer of the Rectum (*Archiv für Klin. Chir.*, Bd. 29, Heft 3) Dr. G. Heuck, of Heidelberg, gives reports of forty-three cases of this affection treated by Prof. Czerny, during a period of six years. In two only were the patients under thirty years, and in twenty-nine cases the disease commenced between the ages of forty and sixty years. Thirty were males and thirteen females. In one case only was there any secondary cancerous disease of the inguinal lymphatic glands. In twenty-five cases a radical operation was performed, and the diseased portion of the rectum excised. Although the peritoneal cavity was opened eleven times only one case resulted in death. Of the nine patients who had remained free from relapse up to the time of publication of the paper, two had survived the operation for more than four years. One was alive after twenty-one months, three after two years, one twelve months, and two at the end of six months. Relapses occurred in fifteen of the twenty-five cases, sixty p. c. In every one of these cases the disease returned within twelve months after the operation. The average duration of the disease from its reappearance to the death of the patient in the fifteen cases was 11·7 months. Wounding of the peritoneum, it is stated, is not attended with much danger, if care be taken by stitching the remaining portion of the gut to the external skin, to prevent fecal matter from coming in contact with the raw surface of the wound. The only contra indications to extirpation of cancerous disease of the rectum are stated by Dr. Heuck to be adhesion of the tumour to parts surrounding the rectum, extreme debility of the patient and the presence of secondary growths in the internal organs.—(*Lond. Medical Record*, April 15th, 1884.)

According to an editorial in the *Phil. Medical News*, Oct. 13th, 1883, it is stated that besides Czerny's twenty-five cases, 198 others have been placed on record. Of the 223, 180 recovered, and 43 (19·3 p. c.) died; 64 remained well for periods varying from two months to ten years. In thirty-five cases there had been no return of the disease for two years and upwards, thirteen had remained well for between five and ten years, so that 15·9 p. c. were in all probability permanent cures.

Mr. Jas. E. Adams (*Brit. Med. Jour.*, Aug. 16th) recom-

mends in cases of cancerous disease of the lower end of the rectum, the performance first of colotomy, and then when the patient has recovered from this, to excise the malignant growth as quickly as possible. He has carried out his method in one case, the patient being alive more than two years after the operation and living in comparative comfort although the disease had returned.

There is no doubt that extirpation of the rectum is in much favour with the German surgeons, but is not so often performed in France or England—colotomy being preferred. There are no doubt many cases where, if seen early enough, extirpation would be the best method of treatment, but there are not a few cases where it is impossible to reach well above the growth with the finger, and these cases call for colotomy, or the French operation of posterior division of the cancerous stricture.

Dr. Fenwick, of Montreal, has extirpated the rectum some half dozen times, and in one case, although the operation was performed some eight years ago, the patient is still alive.

Colotomy.—In connection with cancerous disease of the lower end of the rectum it would be as well to note what has been done lately in regard to colotomy, and to see what advantages, if any, it possesses over other operative procedures and the expectant treatment.

At the 13th Congress of German surgeons, Dr. Madelung, of Rostock, reported that last winter he had an opportunity of performing a modification of colotomy by which the utility of this operation in cases of cancer is considerably increased. Instead of making a small opening in the colon this surgeon cuts through the whole thickness of the gut and then secures the central end to the abdominal wound, whilst the peripheral end is closed and allowed to sink into the abdominal cavity. Great care must be taken to distinguish the centripetal from the centrifugal portion of the gut. The chief advantages of this operation are the protection of the cancerous rectum against the mechanical, septic, and chemical irritation of fecal matter, and its frequent painful accumulation between the cancerous stricture and the sphincter ani. There is less tendency

to prolapsus, and there is also no regurgitation of the fecal matter which in ordinary colotomies accumulates below the artificial anus, and so the surrounding skin can be kept clean. This modification is not applicable to late stages of the disease, when the gut has become over-disintended and the patient much exhausted. (*Beilage zum Centralblatt fur Chirurgie*, No. 23, 1884.)

Mr. Bryant, of London, read a paper on *Lumbar Colotomy* before the late International Medical Congress, held at Copenhagen. He dealt with the operation as a *curative* measure in syphilitic and simple ulcerations of the rectum and colon which resist other treatment, including recto-vesical fistula; as a *remedial* measure in volvulus of the sigmoid flexure as well as obstruction from tumours. He held that in all cases of cancerous stricture of the rectum or colon, which are not amenable to lumbar colectotomy or anal excision, right or left lumbar colotomy is strongly to be advocated, as it retards the progress of the disease, frequently prolongs life five or six years, and relieves suffering. It is necessary to perform the operation before the pernicious effects of obstruction occur. He submitted to the congress statistics of 82 of his own operations, of which sixty were performed for cancerous stricture, nineteen for non-cancerous stricture and ulceration of the rectum, one for volvulus, and two for obstruction due to tumours. Left lumbar colotomy was performed in seventy-seven, right in five. Thirty-three or forty per cent. died within a month of the operation; sixty per cent. of the whole number operated on received benefit from the operation; of the forty-nine successful cases sixteen died within six months, eight lived six to twelve months, twelve from one to five and a-half years, five from five and a-half to fourteen years, and eight left the hospital convalescent. Mr. Bryant, in the last edition of his *Practice of Surgery*, has printed the tables accompanying this paper, and to which I refer readers who wish for further information.

In the October number of the *American Journal of Medical Sciences*, Dr. W. R. Batt contributes a very valuable paper on *Colotomy*. He gives the history of the operation and describes the various methods of performing it. He has collected 351

cases, of which he gives an analysis, and asserts that these statistics show most conclusively that the dangers of the operation are very few, and that the number of recoveries depend very greatly on the nature of the affection for which it is performed; 215, or 62 per cent. of the total number (351), recovered.

Excision of Cæcum.—Mr. Walter Whitehead recently excised, at the Manchester Infirmary, the cæcum and colon of a man suffering from a carcinomatous growth encircling a large extent of the bowel. After excision, the ileum was attached to the skin below and the transverse colon in the skin above, in the primary incision made through the abdominal wall, just outside the rectus. The operation was very tedious and difficult, occupying nearly two hours. It was conducted on Listerian principles. Four days after the operation the patient was free from any untoward symptom.—(*Brit. Med. Jour.*, Nov. 8, 1884.)

Correspondence.

To the Editor of the CANADA MEDICAL & SURGICAL JOURNAL.

DEAR SIR,—As the anæsthetic property of cocaine hydrochlorate is playing an important *rôle* in therapeutics at present I would like to report a satisfactory result I had lately with it in general surgery. The patient was a young married lady in whom a retro-vaginal abscess had formed after a pretty sharp attack of pelvic cellulitis. The abscess was situated in the cellular tissue between the rectum and vagina, extending from the posterior fornix downwards to the perineal body. The patient was placed on her back in the lithotomy position and a small Sims' speculum passed under the arch of the pubis. The whole of the posterior wall of the vagina was painted over with a four per cent solution of cocaine for the period of about ten minutes, using about twenty minims in all. The incision was then begun downwards through at least a quarter of an inch of infiltrated tissue. A director was then pushed forcibly forward for some little distance before the abscess cavity was reached. During the whole of this procedure the patient declared to us whenever questioned that she felt no pain whatever. The anæsthesia lasted about twenty minutes, after which she felt the slightest touch acutely. Dr. G. Ross was present during the operation.

I am, very truly yours,

T. J. ALLOWAY, M.D.

Reviews and Notices of Books.

A Practical Treatise on Fractures and Dislocations.

By Frank H. Hamilton, A.M., M.D., LLD., late Professor of Surgery in Bellevue Hospital Medical College, and Surgeon to Bellevue Hospital, New York. Seventh American edition, revised and improved. Illustrated with 379 woodcuts. Philadelphia: Henry C. Lea's Son & Co.

It is now twenty-five years since this remarkable work was first given to the medical profession. The author was then residing in the city of Buffalo, whence he was soon afterwards called to New York to take the chair of Surgery in Bellevue Hospital Medical College, vacated, if we mistake not, by the death of the great Valentine Mott. Up to the time that Dr. Hamilton began the compilation of his work there was no treatise in the English language which dealt exclusively with the subjects of fractures and dislocations, but before his manuscript was ready for the press, Dr. Packard of Philadelphia had issued the first volume of his translation of Malgaigne's great work on these subjects. Hamilton, though disappointed, perhaps, at being forestalled, was not daunted, but went on to the completion of his admirable treatise, which has now reached the seventh edition. Most of the articles are as complete as it is possible to make them. That on Colles' Fracture has been considerably enlarged. Fractures of the Femur and Dislocations of the Hip have also received fresh attention. The author is evidently not in favor of the new operation of suturing the patella immediately after fracture. He says: "To the testimony thus accumulated against the operation I wish to add my own, that it is offering a very grave and dangerous substitute for others perfectly safe, and, so far as is yet proven, equally efficient methods. It is hazarding the life of the patient without offering any equivalent. Indeed, I do not see why anything less could be reasonably expected from this kind of surgery than tedious recovery, anchylosis, amputation or death; at least in a considerable proportion of cases this is precisely what has happened." We doubt if the evidence justifies the author in the employment of such strong terms of denunciation, especially if we consider the admirable

results obtained by Lister, McEwen, Whitehead and others. However, we would prefer seeing him in opposition, as the operation is undoubtedly a hazardous one, and should be attempted only by those thoroughly acquainted with all the details of Lister's method.

In the section devoted to gunshot injuries, a somewhat lengthy and interesting account is given of the late President's case. It will be remembered that Dr. Hamilton was summoned to attend the ill-fated Garfield on this occasion. Two excellent woodcuts are also given to illustrate the course of the bullet through the body of the first lumbar vertebra.

We felt some disappointment at finding that the author makes no mention of the treatment of fractures of the clavicle by means of rest in the recumbent position and the application of sandbags to the whole length of the bone. We have had such excellent results from this plan, both in hospital and private practice, that we can heartily recommend it above all other methods of treatment in cases where the circumstances of the patient will permit of his remaining in bed. In any case, it should be pursued for one week, when such dressing as Sayre's may be applied.

This work will long hold the first place as a book of reference on fractures and dislocations for advanced students and practitioners of medicine.

The Science and Art of Surgery.—By JOHN ERIC ERICHSEN, F.R.S., LL.D., F.R.C.S. Eighth edition; revised and edited by MARCUS BECK, M.B., Lond., F.R.C.S. Vol. I: pp. 1124. Philadelphia: Henry C. Lea's Son & Co.

It is hardly necessary to say much in praise of a work now in its eighth edition. This last edition is in every way worthy of its predecessors, and is fully up to date as regards recent advances in surgical knowledge. Mr. Marcus Beck has rewritten the pathological portion, and in a manner most creditable to him. The other portions of the work have also been in part rewritten, much obsolete matter has been omitted, and much that is new and valuable has been introduced; 150 new figures have been added. The chapter on the operations practised on the eye has

been omitted. As this chapter was the weakest one in the old editions, its loss will not be much felt. The first volume includes three great divisions—1, *First Principles*, including Amputations and Disarticulations, Inflammation, Suppuration, Ulceration, and Process of Repair. 2, *Surgical Injuries*, including Gunshot Wounds, Hæmorrhage, Fractures, Dislocations, Injuries of various parts of body, Heat and Cold, &c. 3, *Surgical Diseases*, including Gangrene, Septic affections, Tumors, Scrofula, Venereal Diseases, &c. The first volume is well printed, and furnished with a capital index. The second volume is expected to be issued almost immediately. We cannot forbear quoting the following, which appears in the preface: "The teacher of surgery, who seeks to give a true and impartial view of the subject of his tuition, is placed much in the same position as a judge who is summing up a great cause. He must endeavor to divest himself of the trammels of the schools—to free himself alike from partisanship of individual bias and prejudices of professional antagonism." This the author has successfully accomplished, and hence the great and lasting popularity of his work. We can recommend this work to practitioners and students as one of the best arranged, most clearly written, and unbiassed text-books of surgery now before the profession, and one fully up to the level of modern surgery.

Surgical Delusions and Follies—A Revision of the address of Surgery for 1884, of the Medical Society of the State of Pennsylvania.—By John B. Roberts, A.M., M.D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic, Surgeon to St. Mary's Hospital. Philadelphia: P. Blakiston, Son & Co.

"If," says the author, "clinging to ancient fetiches with the superstitious awe of equatorial Africa is an evidence of barbarity, much of the surgery of to-day is indeed barbaric." It is with a few of these remaining superstitions that the address is mainly concerned. The first mentioned is the delusion that chloroform is a safe anæsthetic. Then the uselessness of styptics is exposed, the fear of small hæmorrhages is ridiculed, the hesitation in trephining the skull is censured, operative de-

lay in strangulated hernia is condemned, and temporising with phlegmonous inflammation is denounced. The prevalent notions that traumatic tetanus, pericardial and cardiac wounds are necessarily fatal are looked upon as delusions of a character sure to interfere with energetic and hopeful treatment. The above are specimens only. Quite a number of other glaring delusions are similarly dealt with. So with follies. The ether folly, the incision folly, and the sponge folly lead the way to other most fallacious but common notions entertained regarding the aspirator, drainage tubes, the use of nitrate of silver, the proper doses of medicines, &c. The address is worth reading and it will do good. It will show to many the error of their ways and induce them to depart therefrom.

Elements of Pharmacy, Materia Medica and Therapeutics.—By WILLIAM WHITLA, M.D., Professor to the Belfast Royal Hospital, &c. With lithographs and woodcuts. Second edition. London: Henry Renshaw.

We have already had occasion to notice the appearance of this manual, and take pleasure in introducing this second edition which has been so soon called for. It is one of the handiest, most complete and best arranged books of the kind we know of. Its alphabetical arrangement and the marking of the different departments upon the front of the leaves renders it very easy to find at once any reference which may be required. The therapeutical department is especially worthy of notice as containing all the latest ascertained and reliable facts as to the application of drugs; and the sections on prescription-writing and on non-official remedies will be found extremely useful. It should be recommended at all our schools as a text-book.

Therapeutic use of Faradaic and Galvanic Currents in the Electro-Thermal Bath with History of Cases.—By JUSTIN HAYES, M.D. Chicago: Jansen, McClarg & Co.

The author speaks very highly of this therapeutic means. He says, "I am confident that, as an auxiliary in the treatment of diseases of woman, it is a boon of greater value to her than has been discovered during the last fifty years." Any one possess-

ing the necessary leisure and having any curiosity to see how patients are talked to and treated by the Chicago electrifiers cannot do better than look over the wonderful cases and cures of Dr. Hayes with his electric bath. A greater jumble of medical absurdity it is not possible to imagine. The book should be relegated to lay readers with whom it might serve to advertise the establishment.

The Elements of Pathology.—By Edward Rindfleisch, M.D., Professor of Pathological Anatomy in the University of Würzburg; translated from the first German edition by Wm. H. Mercur, M.D., revised by James Tyson, M.D. Philadelphia: P. Blakiston, Son & Co.

This translation of an important work by the eminent German pathologist will no doubt find many readers. It is intended to represent in a concise manner a clear view of the groundwork of human pathology as recognized at the present day. It presupposes a certain amount of knowledge of the subject, but is of a character to be eminently useful to all advanced students. Used in connection with the author's or some other "manual" of pathology, it will aid in summarizing the subject-matter and materially assist in systematic study.

Books and Pamphlets Received.

Pyuria or Pus on the Urine and its Treatment. By Dr. Robert Ultzmann. Translated by permission by Dr. Walter B. Platt, F.R.C.S. (Eng.) New York: D. Appleton & Co.

Diseases of the Eye and their Treatment. By Henry R. Swanzy, A.M., M.B. With illustrations. New York: D. Appleton & Co.

The Elements of Physiological Physics: An outline of the elementary facts, principles and methods of Physics, and their applications in Physiology. By J. McGregor Robertson, M.A., M.B., &c. Philadelphia: Henry C. Lea's Son & Co.

A System of Human Anatomy, including its Medical and Surgical Relations. By Harrison Allen, M.D., Prof. of Physiology, University of Pennsylvania. Section V—Nervous System; and Section VI—Organs of Sense, Organs of Digestion, and Genito-Urinary Organs. Philadelphia: Henry C. Lea's Son & Co.

A Manual for Bandaging, adapted for Self-Instruction. By C. Henri Leonard, A.M., M.D. Second edition, revised and enlarged. The Illustrated Medical Journal Co., Detroit.

Doctrines of the Circulation: A history of physiological opinion and discovery in regard to the Circulation of the Blood. By J. C. Dalton, M.D. Philadelphia: Henry C. Lea's Son & Co.

A Handbook of Ophthalmic Science and Practice. By Henry E. Juler, F.R.C.S. Philadelphia: Henry C. Lea's Son & Co.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Sept. 26th, 1884.

T. A. Rodger, M.D., President, in the Chair.

Enlargement of the Spleen.—Dr. Armstrong exhibited a boy 11 years of age, whose spleen extended a couple of inches below the umbilicus. Enlargement dated from an attack of typhoid fever three years ago. The lad's mother says that on three occasions he has had attacks of unconsciousness, followed by paralysis of one side, and lasting a few days. There is a diminution of red-blood corpuscles and an increase of white. Improvement in general health had followed the use of Liq. Arsenicalis, and for a time the spleen became smaller.

Dr. Wilkins said he had attended the boy off and on for years. He was not sure if what he took to be attack of typhoid were that, as six or seven months after the boy had a feverish illness, when he became semi-comatose for several days. The spleen at times reached below the crista ilii. Had repeatedly examined the blood; usually there were but one quarter the normal number of red-blood corpuscles. Found no absolute increase of white-blood corpuscles. For a time quinine caused the spleen to get smaller.

Traumatic Tetanus in a woman aged 40.—Dr. Wilkins exhibited part of a foot, also a piece of sole leather, the size of half a pea, which had been driven up into the foot by standing on a nail. This occurred on Saturday. The following Wednesday she was seized with spasms, and removed to hospital on Thursday. It was thought that a piece of the nail might be in the soft tissues of the foot, but after careful examination by Dr. Roddick, nothing was found; but it was deemed wise to remove two toes and the parts for one inch back. On dissecting the piece removed, Dr Wilkins found the bit of hard leather resting on a nerve filament. The symptoms were not much lessened by the operation, the patient dying thirty hours later, probably from asphyxia. Dr. Wilkins said if he had another similar case he would try excising the nerve higher up, say in the leg.

Dr. Trenholme said he had had a case very like this one, where a boy got a splinter of wood into his foot. The splinter was pulled out and the parts healed nicely, but in ten days tetanic spasms followed, ending fatally. Dr Trenholme found a very small bit of wood, surrounded by a drop of pus, in the foot. Dr. Fuller, who performed the *post-mortem*, traced the nerve from the wound to the base of the brain, and found it all inflamed. In the spine, the membranes, as well as the cord, were congested. Some of the fluid from the spinal canal was injected into a dog; paralysis followed, which lasted several days.

Dr. Bell said that he had seen several cases of traumatic tetanus in the hospital. A man was stabbed in the instep with a pitchfork; a bit of stocking was found at the end of the wound. Another case was that of a girl, who had a nail run into her heel. After death he dissected the parts, and found a sliver of iron resting against a nerve filament, which was swollen and œdematous. A third case was where a man was hurt from a fall on the buttocks; symptoms of deep-seated suppuration ensued. The man died seven days after the injury. No *post-mortem* was allowed in this case. On theoretical grounds, Dr. Bell believed success might follow amputation and keeping the patient well under the influence of opium—in fact, pushing the opium as far as possible.

Dr. Henry Howard hoped surgery would prove an aid in these cases, yet he doubted if it were possible. He related several cases which had been under his care—one being that of a son of the late Dr. Mount's, where tetanus followed a scratch on the buttock.

Uterine Myoma; Removal; Death from Exhaustion.—Dr. Wm. Gardner exhibited the specimen, which was about the size of an orange. Patient, aged 52, had had severe hæmorrhages for four or five years. On examination, the above tumor was found, and although very weak, it was deemed wise to remove it, which was done piecemeal. Patient did well for 36 hours, dying from exhaustion 56 hours after the operation. The discharges were never at any time fœtid. The womb was irrigated repeatedly, and at times continuously, by means of the double irrigation tubes. Dr. Browne assisted at the operation. Dr.

Gardner said it was well known that uterine fibroids frequently kept up menstruation for long after the usual time, and were often the cause of the menorrhagias seen at the menopause. Profuse menstruation at the climacteric is not normal, and should be followed by a uterine examination in order to prevent operations being performed upon women already much weakened.

Dr. Trenholme thinks one is not warranted to explore the uterus by the occurrence at this period of menorrhagia alone. The question of operating for fibroids depends upon whether we can control the hemorrhages till after the menopause or not.

Infant Feeding.—Dr. Blackader read a paper on this subject. (*See* Can. Med. & Surg. Jour. *for November, page* 203.)

Dr. Alloway said that infants objected to milk digested with Pancreatic Extract on account of its bitterness. He also spoke of the benefits of using very fresh milk, and the means used to obtain a regular supply, as seen in some cities in the old country, where she asses and goats are brought from door to door and the quantity required there and then milked.

Dr. Gurd asked if the observations made by other members agreed with his, viz., that artificially fed infants were, as a rule, larger than others.

Dr. Campbell agreed with Dr. Blackader that only the minimum of food found necessary should be given. He condemned the more convenient long-tubed bottles as being not only injurious in themselves for many reasons, but also as tending to make the mothers less careful altogether of their infants. It was so easy to put the baby down, with the bottle beside it, and "let it go as you please." His experience coincided with Dr. Gurd's, that artificially fed infants were larger and heavier than others. He (Dr. Campbell) found that stall-fed cows gave a more acid milk, and as many of our city cows were stall-fed, this would account for the reason why milk foods so often disagree.

Dr. Henry Howard said he had noticed that sometimes a mother's milk, whilst agreeing well with her own thriving child, when given another to nurse, the foster child would fail and pine away. When a student in Dublin, had often seen cows led from door to door to be milked for the customers.

Dr. Cameron said if the milk were only partially digested, the bitter taste would not be present. He uses gum water as a diluent for milk in preference to any starchy preparation, believing it less apt to sour. He spoke strongly against the milk supplied to the city, which sometimes for hours was churned in the waggons on their way from the country. Some cows were kept in the city, but these were mostly badly housed and fed. A patient of his, an infant on milk diet, three months old, was suddenly taken with choleraic symptoms. The milk was stopped and it got well; again it was put on the cow's milk, and the diarrhœa, etc., returned. Dr. Cameron went to the milkman's to seek for the cause of this, and found that the day the baby was first taken ill the cows had been fed with old cabbage leaves and turnip tops. He thought the Health Officer ought to look after dairy inspection.

Dr. Wilkins said he had had very satisfactory results with the use of pancreatised milk; has always used Benger's preparation of Pancreatine. At times he has found it necessary to rest the stomach, and so has used it per rectum. Anæmic mothers don't give the quality of milk required, though the quantity may be plentiful. Here he orders barley water, and the child to be nursed less frequently. He said that a drop or two of sour milk left in the tubes of a bottle was enough to set up lactic acid fermentation in a whole bottleful of milk.

Dr. Armstrong had found milk digested with Benger's preparation very useful. On one occasion he fed a three months old infant for seven days entirely by the rectum, the child recovering from its illness.

Dr. Blackader said that the fresher the milk the better for infants. Boiled milk was much more difficult to digest than unboiled. He has noticed that bottle-fed infants were either very large and fat, or just the opposite.

At the annual meeting, held October 10th, the officers for the ensuing year were elected (*see Oct. Number, page* 191.)

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

Successful Yellow Fever Inoculations.

The following appeared in the Paris papers of November 11th, and may be news to yours readers: "In yesterday's session of the Academy of Science, M. Bouluy, Vice-President, entertained his colleagues with a discovery of great importance. Since 1880 M. Domingas Frére, Professor in the Medical School at Rio Janeiro, has occupied himself with this question. He has even made several communications on the subject to the Academy of Medicine. He had not been able to demonstrate the microbe of yellow fever, but ascertained that the virus, of whatever nature it may be, had been attenuated, and that guinea-pigs had acquired immunity. Since then, one of our countrymen, M. Rabourgeon, pupil of Chauveau, Pouchet, and Pasteur, has been called by the Emperor Dom Pedro to found a veterinary school at Rio Janeiro. He started supplied with all the necessary apparatus for the study and culture of the microbes. Domingas Frére and Rabourgeon united their efforts to solve the question. After having carefully experimented on guinea-pigs with the attenuated virus, they inoculated themselves as well as several students of medicine and employés of the museum of Rio. They underwent the symptoms of mild yellow fever which disappeared in three days. The Emperor Dom Pedro visited the laboratory, and having satisfied himself of the excellent results of the method, authorized experiments on human beings. Nearly 200 persons, most of whom were wharf-laborers, summitted to the vaccination and remained unaffected, while around them they saw large numbers of their comrades succumbing to the disease. English sea-captains sailing in these latitudes, learning that yellow fever was epidemic at Rio Janeiro, had all their crews vaccinated, first setting the good example themselves. The description of the microbe will eventually be made. Meanwhile it is certain that the attenuated virus has preserved about 500 animals and human beings, who had submitted to the vaccination. These happy results must be compared with the report made by Dr. Rochard, that of twenty-five physicians sent to Senegal to care for the yellow fever patients, twenty-three had soon died, and the conclusion is near that this vaccination is destined to save the Europeans who visit places

where the yellow fever is endemic. We are happy to see that one of our countrymen, pupil of our savants, is among the new benefactors of mankind.—*Med. News, Nov. 29th.*

Experimental Production of Typhoid Fever.—Dr. Luigi Petrone reports the following interesting observation in *Lo Sperimentale* (April, 1884). A patient, 22 years of age, suffering with typhoid fever, towards the end of the first week had a temperature of 40.3°C. (104.5°F.), when an ounce of blood was taken by a leech. Under microscopical examination he found very few spores, a few short bacilli, many forms and threads, joined together in bundles, all of which forms took staining remarkably well with Weigert's fluid. The next day the blood was injected into two dogs by hypodermic injection. By the next day there was increase of temperature, thirst, and muscular prostration, which were soon associated with anorexia, diarrhœa, tenderness of the abdomen, particularly in the right iliac region, swelling of the spleen, and tympanites. Twelve days after the injection had been made, both animals succumbed. The autopsy revealed recent swelling of the spleen, enlargement of the mesenteric glands, which were decidedly infiltrated; the solitary follicles and Peyer's gland were swollen, and in the lower part of the ileum the mucous membrane was ulcerated. The blood contained micrococci, bacilli, and threads. In fresh preparations of the liver, spleen, large bowel, and Peyer's glands, there were seen infiltrations of bacilli and spores, with spiral-formed threads. From each of the dogs about 15 grammes of blood were drawn and successfully injected into two other dogs, and autopsies of the fatal cases showed a result identical with the foregoing. Recalling the experiments of Klebs and Tizzoni, he draws the following conclusions from his experiments:—

1. The blood of typhoid patients (*typhus-kranker*) is septic, and is capable of infecting animals into which it has been introduced by injection. 2. The infection succeeds immediately in dogs, by means of the blood, without any prodromic symptoms. 3. Clinically, the infection reveals itself in dogs by high, continued, remitting fever, and through a typhoid condition, as it is developed in man. 4. The anatomical alterations found in the experimentally-excited typhoid were developed and maintained by means of small parasites, which were present in the form of spores, bacilli, and a thread-like mycelium.—*Deutsche Medizinal Zeitung; Phila. Med. News.*

CANADA

Medical and Surgical Journal.

MONTREAL, DECEMBER, 1884.

THE LYNAM CASE.

This now celebrated case has probably come to an end—for the present at any rate. We have purposely abstained from any comments upon it whilst it was still before the court. So much interest has been excited by the published reports that no doubt all our readers are aware of the principal facts. Two years ago the wife of one Peter Lynam, having always been a woman with a temper, became morose, excitable and utterly careless of the comfort of her husband and children. Finally she attempted the life of Lynam with an axe, was arrested, confined in gaol, and admitted to the Longue Pointe Asylum as a dangerous lunatic upon the certificates of Dr. Henry Howard and the gaol physicians. She was entered upon the books of the asylum as suffering from erotic mania by Dr. Perrault, the regular physician. Some months ago a gentleman of this city, having visited her, became satisfied that she was sane and endeavored to procure her liberation, stating that Dr. Perrault was of the same opinion. Dr. H. Howard, however, believed her to be still insane and unfit to be discharged. Without his consent (as government visiting physician) she could not be discharged. Application was therefore made before Judge Jetté for an *enquête* to determine her state of mind. This was granted and evidence was heard. The strong point made by the applicants was Dr. Perrault's statement that from prolonged observation of the woman he believed her of sound mind and fit for discharge. The almost incredible thing about this, however, being that, during the whole period of her confinement he had never made a report to that effect to the Government visiting

physician, as the law specially provides that he shall do in any such case. Drs. Pickup, Wanless and Trenholme had also examined Mrs. Lynam and found her sane. The woman herself appeared in court and was examined by the judge, making lucid statements and exhibiting no excitement. On the other side Dr. H. Howard stated his belief that the woman was a lunatic, subject to uncontrollable excitement, during which she was quite irresponsible for her acts. Drs. Geo. Ross and Cameron related their observations of the woman on two separate occasions. At the first interview many suspicious circumstances were observed but no positive evidence of insanity. At the second, in the presence of her husband, there was manifestation of suddenly developed fury of a maniacal character, her violence being directed against her husband, concerning whom also they believed her to be laboring under certain delusions. In their opinion she is a monomaniac of a dangerous character and unfit for liberty. A great many points might be mentioned which, added together, led up to the opinion given. Any one or two of these alone might not seem to have much weight, but, brought together, were thought sufficient to warrant a positive assertion of her insanity. With such conflicting evidence before him the learned judge declined to act without further expert testimony. He therefore applied to the Government to appoint an alienist for this purpose, and Dr. Vallee, of the Beauport Asylum, was finally named. Public opinion was strongly in favor of having Drs. Bucke, of London, and Metcalf, of Kingston, associated with Dr. Vallee, but the final decision left the matter in the hands of the last named alone. Dr. Vallee, after a full examination of the entire case, lasting over several weeks, presented his report to the judge. The conclusion he has come to is, that Mrs. Lynam is not quite sound of mind, that she is not sufficiently unsound to warrant her detention in the asylum, but that when liberated she must be provided with a guardian other than her husband. This report of Dr. Valleé has satisfied general public opinion which, very naturally, sided with a poor woman who was represented as being wrongfully imprisoned, but it does seem to us a very unsatisfactory document. We have no space to analyse it, but let any one read it, and we feel satisfied

that any fair-minded person will say Dr. Valleé's description is that of an insane person. Nor will the doctor himself go so far as to assert that she is sane and fit for discharge, just as might be said of any other patient who had thoroughly recovered his reason in the asylum. He provides especially that she shall be watched and guarded after she is dismissed, and, above all, some one must be made answerable for it that she does not cross the path of her husband. This certainly seems something like substituting confinement in a private house, under a private guardian, for confinement in a public asylum. We cannot look upon Dr. Valleé's report as settling the case, because of its uncertain sound, and we regret exceedingly that the other gentlemen from Ontario were not allowed to unite with him in a commission of enquiry whose verdict would have been assented to by everyone without hesitation. When Dr. Vallée's report was presented, the judge ordered an *assemblée de parents* to recommend a proper person to act as guardian. This advisory body selected Sister Therèse ! The Court, however, rejected this suggestion, and directed that the custody of Mrs. Lynam be entrusted to Mr. Alfred Perry, the gentleman who had interested himself in her behalf.

We cannot close without adverting to the absurdity of the law which allows of an unlimited number of medical witnesses—non-experts—being examined in these cases. It should certainly be altered and power should be given, in all such cases, to the judge to have experts appointed at once, whose evidence alone should be taken.

AS OTHERS SEE US.

The following remarks from an able and honored member of the British Association, Professor Struthers, of Aberdeen, gives a striking picture of the general impression made upon our foreign visitors of the state of medical education in this country and in the neighbouring states. Dr. Struthers, we may mention, is one of the oldest members of the Medical Council of Great Britain, and, whilst Professor of Anatomy in the well-known University of Aberdeen, has taken a life-long interest in British medical politics, and an active part in the important

deliberations of the Council. The opinion of such a man, who specially visited so many of the Canadian and American University seats with a view to personally ascertaining their facilities for medical education and the thoroughness of their teaching, must necessarily be read with interest. We quote from the *Aberdeen Daily Free Press*, 24th October, 1884:—

"Dr. Struthers remarked that his primary object in crossing the Atlantic had been the meeting at Montreal of the British Association, which, they were aware, is to honour Aberdeen next year; but he had taken the opportunity to look into things medical in Canada and in America. The meeting of the Canadian Medical Association at Montreal during three days, just before the meeting of the British Association, afforded an excellent opportunity of seeing the medical profession. Without the least flattery, he must say that he had never heard better speaking than at the very largely attended dinner of that Medical Association, or more evidence of culture in the profession of any country. It was better English, in fact, than one is accustomed to hear in London. The number who are of Scotch parentage, was quite surprising, but that is characteristic of all classes in Canada. The examinations for medical degrees in Canada are satisfactory, indeed appear to be excellent; and this applies no less to the preliminary than to the professional examinations. In regard to schools of medicine, we must recollect that Canada is a young country, and that museums and endowments for scientific objects are generally things of time. But the University of Montreal, McGill University, as it is called, impressed us all as an excellent school, aiming well, and maintaining a good standard in its teaching and in its examinations. Its museums are fair, and in regard to the teaching in the department in which he was specially interested, it was pleasant to see that the able professor of anatomy, Dr. Shepherd, regarded his subject from the scientific aspect also, instead of treating it from the mere professional point of view, as it is too commonly treated in medical schools. The buildings of McGill University, in which the meeting of the British Association was held, are handsome, and the surrounding park, with its fine trees, made us wish that we could have such an environment for our colleges. What it wants is better endowments for its scientific chairs, anatomy, physiology, zoology, botany, and chemistry. It would be to the honour of the spirited citizens of the large and wealthy and beautiful city of Montreal if they supplied these endowments. We, of "the old country," are apt, in a somewhat patronizing spirit, to think

of "the colonies" as places where the professions must be behind, but what we saw of the medical profession in Canada soon removed any such impression; and the profession there deserves the best sympathy and support from Great Britain in its efforts to maintain a good standard in the face of the depressing tendencies of the system of the neighbouring States of America. He had then visited, along with his fellow-traveller Professor Cunningham, of Dublin University, the principal universities and medical schools of the United States. One constantly hears of the looseness of the medical system of America, but it is interesting to see and hear of it on the spot. Great cities, like New York or Philadelphia or Boston, will always produce a certain number of eminent physicians and surgeons, and great men of science will arise here and there, whatever the system of medical education and graduation, or however little encouragement the State may give to scientific research. But what can be expected from a system of medical education which is comprised nominally in three years, but virtually in a two years' course; from a preliminary examination in general education which may look fair on paper, but is virtually little or the nearest to nothing; and from professional examinations which pass the candidates after such a course? School buildings and schools announced in all the superlatives of the English language, raising your expectations, which collapse when the buildings and appliances are seen face to face? The schools and examinations that would aim high are kept down by the bad ones. None feel this more than their own best men, who complain of their helplessness. Though there may be a demand for medical men of such education in the Western and Southern States, it is not clear but that the Universities of most reputation could, notwithstanding, take up a higher position and be successful in attracting those students who hoped to take a better place in the profession, and who might go forth accredited to the public by adding to their degree the name of the University—as Pennsylvania. Harvard, or Yale—from which it was obtained. Nor is it clear why America cannot do what Canada does so well."

Disposal of Sewerage.—A case which has caused considerable comment in medical circles has recently been before the Court of Queen's Bench in this city. The municipality of Verdun, two miles from the limits of the city of Montreal, indicted one Mann, the contractor for the civic scavenging, as a public nuisance, for having dumped a quantity of night-soil

upon a farm near to the houses occupied by several of the residents. It was shown that disgusting stenches had arisen from this deposit, and medical witnesses for the prosecution seemed to have good reason for the opinion that it was extremely likely to be the means of spreading disease. The judge clearly took this view and the jury gave a verdict against the defendant. This decision must have the effect of causing our aldermen and Board of Health to consider how the emptyings of the cesspits are to be disposed of, for they can no longer be spread out upon the land to disgust the neighbours and perhaps sicken their children. In this connection we might draw their attention to what has recently been done in Birmingham. There, they were not allowed to discharge the sewerage into the small stream running through the city. They have consequently adopted the following plan which, according to Mr. Lawson Tait, has reduced the mortality of Birmingham five per thousand:—The waste from the kitchen, etc., is weekly collected and burned in specially constructed furnaces. The heat thus obtained is used to dry the human excreta thus converting it into a valuable manure. Of course the human excreta are regularly collected and transported in closed vessels to the furnaces.—Why should not the system which has worked so well there, answer here ?

Hydrochlorate of Cocaine.—A great number of American observers have been relating their experience with this drug. In operations upon the eye, the almost universal verdict is one of unqualified praise. One operator, however, mentions that in two cases of cataract-operation sloughing of the flap took place and, in view of the undoubted effect of the drug upon the vaso-motor nerves, thinks it worthy of consideration whether this was merely a coincidence or not. No success has followed its application to the sound skin, but after hypodermic injections in the neighborhood, small tumors have been painlessly removed. Numerous examples of its successful application to the larynx are being recorded. Amongst many cases in general surgery, where it has proved very satisfactory, are the following: Evulsion of the nail, incision, &c., of the gums, abscision of the tonsils, making examination in vaginismus, incising strictures,

cauterizing the nares, &c. It has not been found of any benefit when applied in sensitive teeth. We saw it used a few days ago by a medical friend. The case was one of abscess in the posterior wall of the vagina. The usual four per cent. solution was brushed over the part several times within a few minutes, when the tissues were freely incised. No pain whatever was experienced, though the cutting could be felt. A great future seems to be open for the application of this useful drug.

Ontario Medical Act Amendments.—The committee appointed by the Ontario Medical Council to draft amendments to the Ontario Medical Act have had an interview with the Attorney-General on the subject. The first amendment provides that no College shall be entitled to send a representative to the council unless it has a medical staff of teachers actively engaged in teaching. The second provides "That all actions brought against medical practitioners for malpractice must be instituted not later than one year from the date of such so-called malpractice, and also that security for costs in suits for damages be given by the plaintiff": a very good clause, especially in Ontario where suits of this kind are becoming lamentably frequent. Another clause gives to the council "power to establish a code of ethics, and in the event of any violation of the code, to publish the offender by suspension or erasion of his name from the register of the College": a very important and great power—one capable of being the means of great good, if judiciously employed. Another makes the annual payment to the council $5, with privilege of commutation for one payment of $20. These proposed amendments seem to be favorably viewed by the Ontario papers.

The New York Post-Graduate Medical School and Hospital opened its Session of 1884-85 on October 1st, in its new and spacious building, where, during the summer, many changes have been made to add to the comfort of the physicians who attend the clinics. The building is four stories high, has a frontage of ninety feet, and has a large yard, in which is the well-ventilated building for the teaching of operative surgery, regional anatomy, and the like. In the basement is found the

pharmacy and patients' waiting room; on the first floor the amphitheatre, comfortable and light, for surgical, gynecological, opthalmic, and other operations, and for the various clinics; also a second lecture-room for orthopœdic surgery, and instruction in naval, military, and State hygiene; together with eight other rooms for the treatment of patients, and the reading-room, well supplied with medical journals. On the second floor is the large room for laryngoscopy, opthalmoscopy, and otoscopy, with facilities for teaching thirty at once, if necessary. The new histological and pathological laboratory is also most thoroughly equipped, and contains one of the largest collections of specimens in this country. A photographic gallery for taking pictures of important cases is a new feature. The two upper floors are devoted to hospital purposes, where private patients are treated, either in separate rooms or in a general ward, recently opened. During the last session one hundred and eighteen physicians studied at the School, and the present demand for post-graduate instruction is on the increase. During the winter, clinics will be given on the following topics: Surgery, Clinical and Operative; Gynecology, Venereal Diseases, Diseases of the Eye and Ear, Physical Diagnosis, General Medicine, Diseases of Children, Urinary Analysis, Surgical Dressings, Obstetrics, Applied Anatomy, Diseases of the Nervous System, Orthopœdic Surgery, Diseases of the Nose and Throat, Skin Diseases, Pathology and Histology, Hygiene, Pharmacy, Anatomy and Physiology of the Nervous System, and Genito-urinary Diseases.—*Com.*

The Bacillus of Syphilis.—In a preliminary communication to the *Wiener Medizinische Wochenschrift*, of the 22nd ult., Dr. Sigmund Lustgarten, of Vienna, describes tho finding by him of what he considers the true bacillus of syphilis. In two cases of initial sclerosis and in a gummatous nodule he has found micro-organisms of about the same size and appearance as tubercular bacilli. They were found enclosed in swollen lymphoid cells either singly or in groups, and under a high power (Homog. Immer. 1-20) clear spaces could be discerned in the cells. The colouring method he employed to demonstrate

them was entirely different from that used to bring out either the lepra or tubercular bacilli. He maintains they cannot be mistaken for these, and from the fact that they are contained in cells they cannot be due to putrefaction. He promises at an early date to publish his method of coloring.

First Annual Meeting of the New York Medical Association.—This association is composed of those members of the profession of this state who still favor the old code and thus continue their connection with the American Medical Association. The first meeting has been held in New York, and the report of the proceedings shows the work done to have been of very excellent character. The papers were numerous and many of great merit. The attendance was large, and numbered the majority of the leaders of the profession from all parts of the State.

—We publish among our selections an extract from the *Medical News* Paris correspondence, giving an account of the discovery of a mitigated virus of yellow fever, and of the successful vaccination of a number of persons at Rio. If this prove true, it will be an inestimable boon to tropical regions.

—The annual dinner of the Toronto School of Medicine—Dr. Bascom in the chair—was held on the 12th November, and that of the Trinity School on the 20th November—Mr. P. A. Dewar, chairman. Both of these well-established entertainments were well attended by representative men from the different colleges, by prominent University dignitaries, and by eminent citizens, and seem to have been in every way highly satisfactory and enjoyable.

—At the last meeting of the Medico-Chirurgical Society of Montreal, Dr. Roddick exhibited a papillomatous tumour about the size of a hen's egg, which he had recently removed from the bladder of a man fifty three years of age. The ordinary median operation was performed, the growth being found attached by a short pedicle to the left side of the bladder, near the neck. Instant relief to all the symptoms followed the operation, and the patient is now quite convalescent.

—We notice by our American exchanges that there is a very general reduction in the attendance of students at the American Medical Schools, attributed partly to the hard times and partly to the excitement and worry of a presidential campaign. We are glad to learn, however, that at Harvard the entry is considerably above the average. Our own schools seem to have an unusual influx. Both the Toronto Colleges have large classes, while at McGill, not only is the entry of new men exceptionally great, but the total class exceeds by twenty-five or thirty the largest number reached in the history of the school.

—Koch on his critics shows that masterly knowledge of the whole question of Bacteria which we expect from his professional study of the subject. The way in which he has recently exposed the fallacies of Lewis, who stated that an identical bacillus with that of cholera is found in the mouth, and the statements of Finkler and Prior on the bacillus of sporadic cholera, is a warning to observers not to rush hastily into print before thoroughly investigating the subjects at which they are working. He has also succeeded in inoculating animals with pure cultivations of the cholera bacillus and producing a condition identical with that of ordinary cholera.

—The *Therapeutic Gazette*, devoted to the interests of advanced therapeutics—and of those most excellent caterers for the profession, Parke, Davis & Co.—has removed, editorially, from Detroit to Philadelphia, and is now under the management of Prof. H. C. Wood and Dr. Meade Smith. The change will doubtless benefit our valuable contemporary, but we must say that under the management of our esteemed friend, Dr. Brodie, of Detroit, there was much that was alluring about the properties of new drugs; there was also much of important value to the busy practitioner.

—The general committee of the International Medical Congress, 1887, composed of representative men from all points, met in Washington on the 20th ult., to nominate the general officers and presidents of the sections. Dr. Flint, of New York, was elected President of the Congress, and as Vice-Presidents, Dr. Stillé, Philadelphia, Dr. H. I. Bowditch, Boston, and Dr. R. P.

Howard, Montreal. The profession throughout Canada will appreciate the compliment of having a Canadian one of the three Vice-Presidents, and the nomination of Dr. Howard will meet with universal approval. The date of the meeting in 1887 is not yet fixed.

—Dr. Clarkson Freeman, of Milton, Ontario, favors us with notes of an interesting case of rupture of the urethra, of which we make the following abstract:—A farmer, aged 29, fell a distance of ten feet astride a board one inch wide. Bleeding from the urethra was noticed immediately. After some difficulty a No. 5 metal catheter was introduced into the bladder. The instrument was changed every few days until No. 12 was reached. An abscess subsequently formed in the seat of the rupture, which, when opened, gave great relief to constitutional symptoms. The tendency to contraction of the urethra was so great as to necessitate the almost constant use of the catheter for two months. We congratulate the Dr. on the admirable result which followed. He suggests, and we quite agree with him, that the flexible catheter is much to be preferred to the hard unyielding silver instrument in such cases, especially when it becomes necessary to retain it in the bladder for any length of time.

—The two great medical publishing firms of the United States will shortly have rival works on Medicine before the profession. Messrs. Lea & Co., of Philadelphia, announce an American System of Medicine, in five volumes, edited by Dr. Pepper, of the Univ. of Pennsylvania. It will correspond to Reynolds' system, but will be brought well up to date. The first volume will be ready for distribution in February. Wm. Wood & Co. announce a Reference Handbook of the Medical Sciences, in eight volumes, the first of which will be ready in about six months. The work will be on the plan of Quain's Dictionary, but on a much larger scale, and will take in all subjects of interest to the practising physician. We are much gratified to see among the list of contributors a goodly number of Canadians, but we must confess that, to the fifteen names, we should gladly have seen some others added, who would, in

their different departments, have given satisfactory proof of the solid character of Canadian medicine.

—The appointment of Dr. Schweiniger as extra-ordinary professor of Berlin and attending physician of the skin department at the Charité, has stirred the profession of the German capital in an unusual way. The obnoxious Professor owes his appointment to Bismarck, whose physician he has been and whose fat has been reduced and digestion improved under his skilful management. Dr. Schweiniger began, we believe, as a regular physician, and was with Ortel at Munich, Privat-docent, but he has of late been mixed up with irregular modes of practice, and is stated to be an homœopathist. It is rumoured that he challenged Du-Bois Reymond, the Dean of the Faculty, for refusing to acknowledge him. As we gather from our latest German contemporaries the difficulty is not yet settled.

Obituary.

Dr. Geo. W. Nelson.—This gentleman, well known in Montreal, has recently died in California, where he was residing for his health. He was a son of the late Dr. Horace Nelson, and grandson of Dr. Wolfred Nelson, at one time mayor of Montreal. He was a graduate of Bishop's College. Suffering from pulmonary disorder, he sought a more favorable climate where he still did some good professional work, but was ultimately prostrated and has died at at early age.

Dr. Archibald McLeod.—It is with much regret that we learn of the death, in October last, of this promising young physician after a short illness from peritonitis. Dr. McLeod was born on the 16th February. 1859, at Orwell, Prince Edward Island. He is the fifth son of Capt. Alexander MacLeod, of H. M. surveying steamer Gulnare. He studied at Prince of Wales College, Charlottetown, and McGill University, Montreal, where he graduated in arts and medicine (1883), and afterwards completed his medical studies at the New York Polyclinic. He was a brilliant student, showed great judgment and skill as a physician, and had before him a most promising career.

Dr. Edward Jennings, of Halifax, has died at the age of 68 years. He was one of the oldest and best known of the physicians of that city. He graduated in 1843, and has diligently practised his profession since that time. At the last meeting of the Canada Medical Association in Halifax, Dr. Jennings took an active part in the proceedings and read a carefully prepared and interesting paper. He was a man of most kindly and hospitable disposition. He was for many years a coroner and also took much interest in matters pertaining to sanitary science and the public health.

Medical Items.

—An Inopportune Dislocation of the Jaw is one of the topics dealt with by a *feuilletoniste* writing in a recent issue of the *Union Médicale*. It seems that during the performance of a wedding ceremony the bride sneezed so violently as to dislocate her jaw at the critical momement when she should have pronounced the solemn "oui." As she was unable to articulate the word, it was found necessary for the whole party to repair to a surgeon before the ceremony could be completed.

Relative Diastasic Activity of Malt Extracts.—*Maltine.*—An interesting series of reports on this subject has been sent us by Mr. H. P. Gisborne of Toronto, representing the Maltine Manufacturing Co. of New York. The text upon which reports are based is the proposition of that eminent authority on "Digestive Ferments," Dr. Wm. Roberts of Manchester, that "if properly prepared, Malt Extracts have a high power in digesting starchy matters." Dr. Roberts, however, is of opinion that a large proportion of the Malt Extracts of commerce have no action upon starch, and quotes the fact that "out of 14 trade samples examined by Dunston and Dimmock, only three possessed this power." Of these, Maltine was found to be most powerful. The Maltine Manufacturing Company, moreover, submitted the question to the leading chemists of the world, and in the report above alluded to we have analyses from many eminent analytical chemists of Europe and America, with a unanimous conclusion in favor of Maltine, both as a constructive and digestive agent. Those interested in the subject can secure copy of reports by addressing H. P. Gisborne, 10 Colborne street, Toroto.

"Peptonized" Cod Liver Oil and Milk.—This preparation is an instance of the perfection to which modern pharmacy has attained. Containing a considerably greater percentage of oil than is usual in Emulsions, the objectionable features of the Oil are so completely masked as to render the material perfectly palatable. The Oil is, moreover, *peptonized*, making its assimilation a matter of little effort to even the most delicate stomach. Like all preparations of Messrs. Reed & Carnrick, this one is in general favor in the United States, and will no doubt prove equally acceptable here.

CANADA
MEDICAL & SURGICAL JOURNAL

JANUARY, 1885.

Original Communications.

CHARCOT'S JOINT DISEASE.

By C. L. COTTON, M.D.,
COWANSVILLE, QUE.

(*Read before the Canada Medical Association, at Montreal, August*, 1884.)

Mr. President and Gentlemen,—As the subject of Charcot's joint disease has recently attracted a good deal of attention, I trust a few notes of a case, which I have under observation, may prove of some interest to this meeting:

H. G., aged 42, a native of England, engaged in the dry goods business in New York during 14 years. He has a good family history, no case of nervous disease that he can discover. He had convulsions when a child, but enjoyed generally good health until 1876 when he noticed strabismus of both eyes. He had one eye operated on in Glasgow and the second in Paris, since which time he has had no further trouble with his eyes. In looking back he can notice some failure in his gait in 1879, which was soon followed by neuralgic pains in his legs. These began quite suddenly. He can remember distinctly the place and hour when he had the first attack. He describes them as the usual pains of locomotor ataxia are described—as lightning-like pains. These have continued until the present, each attack lasting two or three days, and then an intermission of two or three weeks. He also had a cord-like feeling about his waist and a weakness in the knees.

He first came under my notice in December, 1879, when he presented very typical symptoms of locomotor ataxia. His walk

was quite ataxic, could not stand with his eyes closed. Patellar reflex absent; complained severely of the feeling of girdle pains; some loss of power over the sphincters and diminished cutaneous sensibility in the legs. He continued in very much the same condition, but with a gradual failure of co-ordination until July, 1883, when one day after using a saw in such a manner that his right leg was put into a swinging motion over the edge of a box, the under surface of the thigh coming in contact with the box, he noticed immediately afterwards his knee very much swollen, and during the day the leg, foot and toes were involved in the swelling. There was a slight purple discolouration on the under surface of the thigh. My attention was called to it about ten days later; there having been no pain about it from the first, it had been looked upon as a simple sprain. I found the knee and leg as far as the ankle much swollen, the joint full of fluid and crackling on pressure. It had the appearance of a joint undergoing rapid disorganization. His present condition one year since the knee was first affected will be seen by the appearance of these photographs. The joint is enlarged; the lower end of the femur appearing to be much enlarged. There are no apparent bony outgrowths. Both bones of the leg are dislocated outwards, though they can be readily replaced, and in doing so give rise to a sound as if the ends of the bones were quite worn away. There is no fluid in the joint, no crackling feeling present. The veins are much enlarged over the knee. Both legs are much wasted; patellar and plantar reflexes absent; cutaneous sensation entirely absent in the feet, legs, and lower half of the trunk. He can support part of his weight on the diseased knee, but is afraid to do so; consequently he does not attempt to walk, but gets about comfortably in a wheeled chair. Appetite good. Digestion sometimes at fault, but generally fair. Sexual power lost during the last twelve months. The sphincters are weakened. At times he can control his bowels and bladder; at other times he finds it impossible to do so. Has never had gastric crises, and never felt any pain in the affected knee. Girdle pains have disappeared. In reference to the loss of sensation, it is curious to

note that he has a large corn on one foot which often causes him severe pain. He complains of much numbness in his fingers.

The question of the relationship of joint affections occurring during the course of locomotor ataxia with the especial lesion of the spine has been very freely discussed during the last few months; giving rise to papers at the clinical and pathological societies of London. Charcot, whose name has been associated with this disease, in his earlier observations attributed it to the anterior cornua of the spinal cord becoming involved in the diseased process. But further post mortems showed that the disease could be present without disease of the anterior cornua being demonstrated. Dr. Buzzard is strongly inclined to the opinion that the pathological centre is to be found in the medulla oblongata and brings forward as evidence the frequent presence of laryngeal, gastric and intestinal affection (more than 50 per cent.) associated with bone joint troubles. Sclerosis attacking the vagus centre is in short his pathology. Thus far there has been no discovery of a joint centre in the nervous system, and it would seem that, with the close pathological study that has been given to "centres," if such a centre existed, the question would have been set at rest before this. Charcot depends chiefly on the clinical features and pathological changes in his assumption of this being a distinct specific arthropathy. Another view of the pathology of these cases is that they are an ordinary arthritis modified by the conditions of the patient. In support of this view are the very similar joint changes noticed after injuries to nerves. Weir Mitchell, Sir Wm. Gull, Ziemssen and Charcot have all noticed cases of arthritis due to nerve lesions, and it is a question whether rheumatism has its origin in the nervous system. These lesions are usually ascribed to the inhibition of the trophic influence of certain nerves. The third view of the pathology of these joint cases is that they are ordinary rheumatic or other forms of arthritis occurring in ataxic patients independently of their nervous disease. My experience of these cases being limited to the one under discussion, I must leave the question of pathology to others who have had more experience. But I must observe that the course of this case

has been different from any joint affection that has come under my notice. The entire absence of pain, the rapid disorganization of the joint, with the history of a slight injury, would incline me to the view, that, firstly, there must have been a predisposition to joint affection, otherwise so slight an injury could not have caused such a serious effect; and secondly, that the trophic nerves, and I think it is generally admitted that certain nerves have trophic influence, must have become seriously impaired in their function. If these joint affections occurring in locomotor ataxia are not specific arthropathies, and I do not think that this has yet been proved to a certainty, yet there is no question in my mind that they are strongly modified by the diseased nerve influence.

PUERPERAL ECLAMPSIA—INDUCTION OF PREMATURE LABOR—DELIVERY WITH FORCEPS—SUCCESSFUL TREATMENT WITH PILOCARPIN.

By J. CAMPBELL, M.D.C.M., and L.R.C.P., Edin., of Seaforth, Ont.

(*Read before the Huron County Medical Association, October 7th*, 1884.)

About 11 a.m. on the 2nd of September last, was called to see Mrs. B., æt. 30, pregnant for the third time. Found her in bed complaining of severe frontal headache and pains in the epigastrium. She appeared to be quite rational. She had been washing and sawing her own wood the day previous. Asked her if her urine was scanty or high-colored, and received a reply in the negative. Wished to see some, but could not procure any. Having no catheter with me, I asked her to keep some of her urine for me. Ordered cold to the head, heat to the feet, enjoined perfect rest and quiet, gave a dose of chloral, and left. At one p.m. was called in haste, the messenger saying that she had taken a fit. When we reached the house she had recovered from the first seizure, but within half an hour took another. Endeavored to control them by inhalation of chloroform, and gave a drop of croton oil in a teaspoonful of castor oil. The convulsions were severe, and about thirty minutes apart. Began to give chloral in gr. x doses, but the convulsions came so close and were so deep that she was unable to swallow the medicine.

The bowels now began to operate freely, which prevented us from giving chloral and bromide per rectum, as otherwise we would have done. The chloroform merely modified and somewhat retarded the seizures. The os, which at first was not dilated in the least, now began slightly to relax. The question of inducing premature labor and emptying the uterus now occurred to me, but I asked for the assistance of another medical man. After a consultation, we agreed to continue the anæsthetic and wait until the os was somewhat dilated and dilatable. Moreover, in the meantime we aided the dilatation with the fingers—a method that is condemned by some and advocated by others. By 4 p.m., finding the os slightly dilated, I passed up a uterine sound and succeeded in rupturing the membranes. Some time after this we gave a full dose of ergot. The convulsions, however, becoming deeper and deeper, with shorter intervals between, and finding the os dilatable, though not sufficiently dilated, I attempted to apply the forceps cautiously, and after some manœuvring succeeded, and soon delivered a male child, which we were fortunate in resuscitating. The placenta came away without much difficulty, and, contrary to our expectations, we had no hæmorrhage. Passed a catheter, and found only two teaspoonfuls of urine in the bladder, though she had not made water for twelve hours. Upon testing for albumen, found it nearly solid. My medical assistant now left me to watch the case alone. The fits continued, and grew deeper and deeper, with shorter intervals between, and at 9 p.m. I felt that my patient must go unless something more was done for her than had yet been attempted. I remembered that I had never regretted dosing too much in a serious case, but had often been sorry that I had done too little. I therefore injected gr. $\frac{1}{4}$ of pilocarpin (Wyeth's preparation) under the skin of the arm, and in fifteen minutes afterwards the most profuse sweating and salivation took place. Her clothes were as wet as if she had been dipped in the river, and the saliva fairly poured out of her mouth and nostrils, almost suffocating her. The nurse and myself kept taking it away with a towel, and raising her up betimes to prevent her being choked. We observed that in point of time the

salivation came on first. The convulsions at the same time moderated, and they were longer in returning, while we observed that she passed water involuntarily. By 11 o'clock the effect of the medicine had, in a great measure, subsided, and the fits began to return with their usual vigor. I injected the same quantity again, with the same result. My consultant now arrived, and said the patient would die; and certainly appearances were in favor of his prognosis. However, as I felt certain she would have died at any rate, if left alone, there was nothing to be lost, and there might be something to gain, in trying the pilocarpin, as we had already done, and I felt sure there could be no reflections from the friends. At the time my medical friend came in, the pulse was weak and rapid, the lips and nails were blue, the patient was tossing to and fro in great distress, the perspiration was pouring from every part of her body, and the saliva was issuing from mouth and nose in great lumps of foam. The fæces and urine were passed involuntarily, and everything pointed to a speedy death by collapse. However, this did not take place. She took no fits after the last injection, and by 4 o'clock next morning she had rallied to a remarkable degree, and by 8 a.m. had, to all appearances, recovered, with the exception that she was still weak and was out of her mind. A period of maniacal excitement now supervened, which continued for over 24 hours, and complicated matters very much. By testing the urine, we found that the albumen was rapidly diminishing. At first it had been nearly solid; next it was one-third; now it was only one-sixth albumen. We now gave a diuretic with the happiest results, the albumen gradually, but steadily, diminishing until, within four days of the attack, it had disappeared altogether. The third day the temperature, which had all along remained either normal or below the normal, rose to 101½°F., but it gradually subsided, the milk was secreted, the woman became quite sensible, but felt weak. She had no recollection whatever of what had happened, not even my first visit two hours previous to the first eclamptic seizure, when she talked apparently so rationally. When she recovered her senses, she said that she could not see us, but could tell us by the sound of our voices.

After a time she could distinguish our faces, and, still later, tried hard to read the time of day on a clock about twenty feet from her bed, but failed. She did not say that she only saw half of an object, as some people are said to do after having taken pilocarpin. The disordered vision continued through the third and fourth day, but whether this was the effect of the albuminuria, or of the pilocarpin, or of both combined, we could not say. By the fifth day I discontinued my visits, but heard from the friends daily for some time afterwards. Both mother and child did well.

Remarks.

Gentlemen, I feel certain that Wyeth's pellets of pilocarpin saved my patient, and it was a fortunate circumstance, to my mind, that the medicine was in my pocket at the time, or, probably, I would not have used it.

2. Under similar circumstances, I would use the pilocarpin as I did in this case, only not in such large doses. Probably one-eighth of a grain is enough to begin with, to be repeated when its effects are passing away. There was extreme danger of death at one time in my case from the excessive salivation, which could likely have been avoided by using a smaller dose.

3. Though I believe pilocarpin to be a valuable remedy, at the same time it is a somewhat dangerous one, and should be used with caution until the action of the drug is better understood. I would first use the chloral-hydrate, potas. bromid., purgatives, sweating, hot baths (if convenient), chloroform, cold to the head, &c., keeping pilocarpin in reserve, as we did in the case which has just been reported. When better understood, it will no doubt come to be used with greater freedom, and will, we believe, prove to be a valuable acquisition in the treatment of the frightful malady we have just been describing.

REMARKS ON CLINICAL CASES.

By WILLIAM OSLER, M.D.,
Professor of Clinical Medicine, University of Pennsylvania.

Gentlemen,—The case of *Typhoid Fever* which you saw at the last clinic died on Monday. The prominent features of the case were: Illness of over three weeks' duration before coming to hospital—fever, headache, and diarrhœa; in bed on and off during this period, but up and about for days at a time. Came to Dispensary on the 8th, and was admitted. The temperature was 103°F.; pulse 90, dicrotic. He was bright mentally, and did not present the appearance of a man who had been ill three weeks with fever. When you saw him on Thursday last he had all the appearance of a man with typhoid; the symptoms were not grave; temperature not high; pulse not over 100. There were two unfavorable features in the case,—the fact of his having been neglected for three weeks and allowed to be about while the fever was on him, and the nervous twitchings of the muscles. An unfavorable prognosis was given. The subsequent course was briefly as follows: On Friday evening the temperature rose to 105°F., and throughout Saturday and Sunday there was a constant tendency to elevation, kept down but feebly by quinine in 15 and 20 gr. doses, and cold sponging every hour or two. On Saturday the lowest temperature was 101-2°, and the highest 105°. On Sunday it rose to 106.2°. He retained consciousness in a remarkable and unusual manner. He took stimulants and nourishment every alternate hour. The diarrhœa was never troublesome, but the stomach became a little irritable on Saturday and Sunday, so that the quinine had to be given at times by the bowel. It is exceptional for cases such as these to get well, and when a man walks into your office complaining of fever, headache, and malaise, says he has been ill a couple of weeks and has been fighting against it, and you find his temperature 104° or 105°, you may expect a case of severity. As I mentioned at the last lecture, there is no worse feature than such a history. The nervous or rather muscular twitchings are also of evil omen, indicating implication of the nerve centres.

They may even amount to convulsive jerkings of the head, trunk and extremities, and I remember one case in which the muscular spasms were so prominent that the disease was thought to be spinal meningitis.

Heart Disease: Action of Digitalis.—This old man, aged 75, you also saw at the last clinic, and he is brought in to-day to demonstrate to you the beneficial effects of digitalis and rest. He has mitral disease, which probably followed an attack of rheumatism in 1854. On Thursday last, three days after his admission, he was, as you remember, very short of breath, the feet and abdomen were dropsical, the pulse was small and exceedingly irregular, and the amount of urine was reduced. He has had 10 ♏ of the tincture of digitalis every four hours, day and night, and has been kept quiet in bed. The changes are: 1st, The pulse is slower, fuller and only occasionally intermits. Those of you who saw him in the ward-class the day after his admission will recall the extreme feebleness and the irregularity of the pulse. 2nd, The breathing is quite relieved; he can lie down comfortably, and walking is not an exertion. 3rd, The dropsy has disappeared entirely from the legs, and has almost all gone from the abdomen, which, as you see, is relaxed, and only gives indication of a small amount remaining. 4th, The urine has increased from 3 and 3½ pints to 6 and 7 pints in the 24 hours. He has been taking the digitalis ten days, ʒi in the day—not a very large amount, but it has served our purpose.

Caisson Disease.—The man, J. Farrell, aged 30, who came to Hospital yesterday (17th) with a heavy cold in his chest, is also—or rather has been—the subject of an interesting disease to which the workers in the compressed air of the caissons are liable. Two months ago he went to work at Perryville, on the Susquehanna, where they are building a bridge, and in sinking the piers the workmen are in caissons, as they are called, in which the pressure may amount to two or three atmospheres. Until Sunday last (13th) he had never suffered any inconvenience, beyond occasional "bends," as he calls them, to which I shall refer later. At 4 a.m. on Sunday he came up from work feeling all right, but before he could get to his boarding-house

the left leg became numb, cold and dead, as he puts it, from the hip down, so that he could not walk, and had to be carried home. It did not appear to be painful, but he says the sensation in it was gone. It remained in this state all day, but towards evening he could move it a little, and on Monday morning the power was quite restored. He did not attempt to go to work again; was too much scared! There were some pains about the legs and arms for a day or so, and a feeling of dizziness, particularly if he looked up or looked from a height. He has now quite recovered, except that on walking, if he looks up, he staggers, and there is a tendency to sway when the eyes are shut. The patellar tendon reflex on both sides is a little exaggerated; no ankle clonus; skin reflexes normal. No other special features. He says that the workmen are much subject to what they call "bends," which, so far as I can make out from his imperfect account, are attacks of pain in the arms or legs, often about the joints, but whether accompanied by spasm or cramp of the muscle does not appear very clear from his statements. These attacks never come on while in the caisson, but *always* a few hours or less after they have come up. So also with the more severe attacks; they invariably come on after leaving the caisson, never in it. He states that two men have died of the affection, and that one man is now in hospital paralyzed in both legs. In the building of the Brooklyn bridge, many cases of this curious disease occurred, and Dr. Andrew H. Smith of New York made a special study of it, and was, I believe, the first to give the name by which it is now generally known. According to his description, it is characterized by pain in one or more of the extremities, sometimes with pain in the stomach and vomiting. There is paralysis, local or general, but most often in the lower limbs. Headache, vertigo, and coma may occur. Cases may prove fatal with these symptoms, and, *post-mortem*, congestion of the brain and cord has been found. In sinking the piers for the bridge at St. Louis, there were many cases, and there were twelve deaths among the 352 men employed. The disease has been known to French observers for many years, and has also been met with in miners working

in compressed air, and in sponge divers in the Mediterranean. There appears to be no difficulty, in the majority of the workmen, in standing a pressure of two or three atmospheres, and, as a rule, no inconvenience is felt further than the temporary pain in the ears, due to the pressure on the drums, which disappears gradually. Naturally, there is a tendency for the blood to be driven into the deeper parts, the superficial vessels are compressed, there is less blood in the skin and more in the viscera. The brain and cord, enclosed in solid, incompressible cases, will also have an additional amount of blood. But this does not appear to produce any inconvenience, and men can work for hours under a compression of three or even four atmospheres. The danger is in the transition from a high to a low pressure, and, as this patient has told us, the men are never affected in the caisson, but always on coming up. The occurrence of sudden death, or a rapid paralysis, suggest hæmorrhage as the cause, but it has been shown by Hoppe-Seyler that there may be a sudden development of nitrogen gas in the blood on removal from high to a low pressure atmosphere, and he attributes the symptoms and the fatal result to the evolution of this gas, the bubbles of which plug the capillaries in the lungs and produce dilatation and stoppage of the heart. Bert states that in an animal under very high pressure, the blood, when withdrawn at low pressure of the atmosphere, will foam from the rapid evolution of nitrogen. The paralysis is probably also due to this cause, and in one case Leyden has found, 15 days after the onset of the paraplegia, lacerations in the cord, which he attributed to the action of the gas bubbles, distending and tearing the capillaries. Schultze, in another case—death 2½ months after the onset,—could only find disseminated areas of sclerosis. This really seems to give a satisfactory explanation of the cases, and in this man we may suppose that he has had local development of gas in the lumbar region, limited in extent, probably not destructive, but only expanding the capillaries and inducing a monoplegia, which disappeared with the absorption of the gas. Paul Bert found that if the animals which had been exposed to the pressure of several atmospheres were to be kept alive, the

transition to the normal atmospheric pressure must be slow and gradual, so as to permit of the gradual diffusion of the superfluous gas absorbed by the blood under the high pressure. So also it is recommended that, on the first onset of symptoms in men working in caissons, they should be submitted again to the pressure, which should be gradually reduced to the normal standard.

Emphysema—Bronchitis.—This man, J. S., aged 35, came to hospital complaining of great shortness of breath and cough. When stripped, he carries, as you see, the diagnosis in the form of the chest and the peculiar mode of breathing. Inspection shows a short, well-nourished man, with a full, barrel-shaped thorax, into which the head seems set by a very short neck. Watch the peculiar mode of breathing. The inspiratory act is labored, accompanied with more elevation than expansion of the chest-walls, but the abdomen rises considerably. Expiration seems still more labored, and is fully twice as long as inspiration. It looks as if the air were forced by muscular exertion out of the chest; and so it is. With each act there is very audible wheezing, most marked with expiration. The finger tips are a little livid, but there is no cyanosis of the face. On placing the hands upon the chest, ronchial fremitus can everywhere be felt, but most intense at the right apex, in front. Percussion gives a hyper-resonant note over the various regions, except the left base and lower axillary regions, where there is defective resonance. On auscultation, there are innumerable whistling and sonorous râles over the whole chest; nothing else can be heard with both inspiration and expiration. The high-pitched ones are most prevalent. There are two places where there are special features. At the right apex the sounds are extremely hollow, and there may be here either a cavity or, what is more likely, dilatation of the bronchial tubes; at the left base, with the piping rhonchi, there are many liquid râles, and there is possibly here some infiltration—œdema of the lung. The cough is most distressing, frequent, and the sputum is got rid of with difficulty. It is tenacious, thick, and purulent. The area of heart's dulness is covered by lung, and the liver is

depressed. The points in the history are briefly as follows:— He is a jeweller by trade, and has used the blow-pipe a great deal for 15 or 16 years. He tells us that sometimes he would require to keep up the flame for 15 or 20 minutes, only intermitting enough to catch the breath. The family history is good, and he was always pretty healthy until three years ago, when he was laid up with a severe bronchitic attack for three months, and ever since he has been specially liable to catch cold, and has had four or five spells of shortness of breath and severe cough; none have been so bad as the present one, which came on a week ago, with fever, cough and dyspnœa. Two conditions are here present: Emphysema, a permanent and irreparable affection of the lungs; and Bronchitis, a transitory and curable condition, upon which his chief symptoms now depend. Two weeks ago this man could get about satisfactorily, and, if he took it quietly, could go up stairs without difficulty, whereas now he puffs and blows on the slightest exertion. The emphysema has no doubt been caused by the habitual use of the blow-pipe in his occupation, and every such attack as the present one leaves the lung in a worse condition than before. Just now the bronchitis is the main trouble, and the swollen state of the mucous membrane retards the access of air to the alveoli, while the loss of elasticity in the lungs renders expectoration very difficult, and the cough is in consequence hard and distressing. On his admission, he was ordered a relaxing expectorant (chloride of ammonium grs. x, with ipecacuanha wine 20 ♏) every three hours, and already, after two days, he is much relieved. Jacket poultices, frequently changed, are very useful when there is much soreness in the chest. The existence of local trouble at the right apex may delay convalescence, but the bronchitic symptoms should disappear in a few weeks.

Correspondence.

New York, January, 1885.

The two schools for practitioners—the Polyclinic and Post-Graduate—have each had a successful season ending with the year. Both have men of ability as teachers, who are zealous as well as able. The advantages of each appear to be on a par. If the Polyclinic has a greater abundance of material, it has a corresponding greater number of men among which to divide it. I myself am attending the Polyclinic, and am very well pleased with its practical teaching and the facilities it offers for the personal study of disease. The gynæcological course in both appears to be the most popular—not, as some of your readers may think, from a growing desire of many practitioners "to fumble" with the uterus, but from an inward conviction that on that subject they are weak; and no matter how much they may wish uterine symptoms did not exist, patients will come to them suffering from such symptoms, for which they seek alleviation and cure.

The fees for a three months course, including everything, are $150. Dissecting material is not included in the above. Board can be obtained for from $6 to $10 per week; two together can live very comfortably, in a fair part of the city, for $8 a week. These schools supply a want that was much felt on this continent. Evidence of this is found in the fact that since they originated, a couple of years ago, there has been almost a constant attendance of a hundred practitioners. The men attending the schools are for the most part well advanced in years. A graduate of six or seven years' standing is merely considered a "youngster." Most of the men come to "brush up," others for the purpose of making better men of themselves with a view to changing a country for a town or city practice, while a third class take it in as a part of a holiday well earned after a number of years of hard work in practice.

Through the kindness of Dr. Emmet, to whom I had a card of introduction from my valued friend Dr. Hingston, I have received invitations to nearly all the operations performed at the Woman's Hospital. Dr. Emmet has devised an operation

which more efficiently repairs a lacerated perineum than any of the operations hitherto performed. The operation is the result of close observation, for over twenty years, of those affections. His attention was first attracted by the great disparity often observed between the apparent extent of the laceration in the perineum and the symptoms that followed. The perineum might be torn through to the sphincter with very few ill results, while, on the other hand, an insignificant tear might be accompanied by a train of symptoms consequent on the rolling out of the vaginal walls and dragging down of the uterus and bladder and rectum. On close observation and study of a great number of cases, he arrived at the conclusion that in the so-called "lacerated perineum" the defect is not in the rupture of the "perineal body," but in a separation of the pelvic fascia which holds the vagina suspended, so to speak, from the pelvic roof. That in lacerations, excepting when produced by the forceps, the tear is from within outwards, and not in the reverse direction, as is generally taught. I shall not attempt a description of the operation, for to be understood it must be seen, but after witnessing several being done, and having seen some of the patients after the parts had healed, I can unhesitatingly say that it possesses all the advantages over the old operation that Dr. Emmet claims for it, with one exception—easier performance. The denudation of the parts is simpler, but, to my mind, it requires more skill to pass the sutures, which, by the way, are all passed within the vagina, and are not seen externally. The advantages over the old are: 1, It brings up the posterior vaginal wall more effectually. 2, It makes a more firm perineum that is not so likely to be torn in subsequent labors. Every one knows that the result of the old operation often is merely the union of the external integument, which, as Dr. Emmet forcibly expressed it one day, "is like sewing up a woman's drawers to give support to her generative organs." 3, It is not necessary to withdraw the urine, hence a trained nurse can be dispensed with. 4, The stitches are not so painful. 5, Easier performance. This, however, is open to doubt, as I have already stated.

It may seem that I have dwelt with undue length on this sub-

ject, but, in my opinion, the importance of the matter demands even fuller treatment than I have been able to accord it in a communication of this kind. The operation is being pretty generally adopted by the gynæcologists of this city. Every day Dr. Emmet operates at the Woman's Hospital; a host of men from Philadelphia and other parts are to be seen closely observing the operation. All go away well pleased with it, and with the determination to perform it on the first opportunity.

New York is proud of its Woman's Hospital, and one need only to have a slight acquaintance with the working of the institution to become fully convinced that there are just grounds for pride. I believe one can safely assert that it has not its equal in the world. Its statistics may not offer as good a showing as some others of a similar nature beyond the ocean, but, in judging of these, one must take into account that cases are operated upon here that would be left untouched in other parts of the world. A case in point occurred a few weeks ago.

Dr. Thomas operated upon a patient who was very much emaciated, and whose general condition was extremely low. For a fortnight prior to the operation the patient's temperature ranged from 101°F. to 103°F. It was a question if she would not succumb to the anæsthetic. The operation proved a double one, for after removing a large ovarian cyst with considerable adhesions, the uterus was found to be involved by a fibroid the size of a child's head. This was also removed, the whole operation occupying a little more than 25 minutes. In its performance, Dr. Thomas illustrated his maxim in these cases, where each minute, during which the patient is under the anæsthetic, means one chance less for the success of the operation, "operate quickly, but don't be in a hurry." Of course the assistants, Drs. Chambers, Ward and the staff of the house, left nothing to be desired; every gesture of the operator was understood, and every wish anticipated. The patient has made a good recovery, and is about in the wards.

The other day I was present when Dr. Hunter cut down on an abdominal tumor, expecting a simple ovarian cyst, but found an immense fibroid of the uterus, with very extensive adhesions.

He coolly set to work to battle with the unexpected foe. The abdominal incision was enlarged, the adhesions carefully separated, those existing between the bladder and tumor were very firm, and necessitated the greatest care and caution. Having freed the tumor, he firmly encircled it by rubber tubing, then cut it away, with no loss of blood; the surface of the pedicle was quite blanched. The pedicle was slightly cauterized by hot irons, and retained projecting through the abdominal wound by a couple of knitting needles. The house surgeon, Dr. Vaners, (to whom I am indebted for many acts of courtesy), tells me the patient is progressing favorably, and he expects to have her in the wards in a few days.

At the last stated meeting of the Academy of Medicine, December 18th, the capacious hall and adjoining room were filled to overcrowding, and intense excitement prevailed. The ostensible object of the meeting was to hear the report of the Committee on Ethics on a charge of no less than dishonorable conduct and perjury of a Fellow, the Fellow being none other than the venerable and distinguished president of that august body—Dr. Fordyce Barker. The charge was preferred by six Fellows, the leading spirit being Dr. A. Flint, jr., and was to the effect that Dr. Barker, on becoming a Fellow in 1856, had signed his name on the books of the Academy as a graduate of L'Ecole de Medecine, Paris, and also that in accordance with a by-law passed in 1880 had registered and sworn before the City Clerk that he was a graduate of the above-named school. Sharp at eight o'clock p.m. the president, who is of erect stature, firm physique, possessing a beautiful cast of features, and with silvery locks and snowy-white side-whiskers, walked up the aisle to his chair amid great applause. He opened the meeting and then vacated the chair for the vice-president, Dr. Weir. The report of the committee was read by its chairman, Dr. A. H. Smith, and gave in full the evidence *pro* and *con*. It was the unanimous conclusion of the committee that the charges were not sustained. This decision was accepted with great enthusiasm, and a motion passed that the report be recorded in the books of the Academy. Several motions were then moved, beginning

with censure and winding up with expulsion of the Fellows that made the charge; but on Dr. Dalton moving that the motions be laid on the table, and Dr. Barker saying that he thought the Academy acted wisely, and that he was pleased to let the matter rest where it now stood, the former motions were all withdrawn. On resuming the chair, Dr. Barker said: "Here endeth the second lesson. The Academy will now resume its scientific work, which it has continued zealously, efficiently and harmoniously for thirteen months, until the present interruption by this supreme effort to elevate the character of the medical profession."

At a prior meeting of the Academy, a very important discussion took place on a paper read by Dr. Winters—"Is the operation of Tracheotomy for Diphtheritic Croup dangerous?" The reader of the paper urged the early performance of tracheotomy, and thought that its difficulties and dangers were overrated; that every physician should be prepared to perform the operation on a moment's notice. Drs. Wright, Jacobi, Lewis Smith and Ripley took part in the discussion.

Dr. Jacobi, whose utterances on this subject always command the greatest respect, while agreeing in the main with the reader of the paper, thought that the operation should not be hurriedly performed, and that the greatest care should be exercised. He would deprecate incising the thyroid gland unless the urgency of the case demanded immediate entrance into the trachea. He considered the operation was demanded equally as much in diphtheritic laryngitis as in membranous croup. In the former, one source of systemic infection was thus avoided by the inspired air not having to travel over the diseased surface of the pharynx and larynx. In laying down a guide as to when to operate, Dr. Jacobi would operate in any case in which there was considerable laryngeal stenosis, recession about the supra- and infra-clavicular and ensiform regions, particularly if these symptoms increased in the morning, and if the pulse was becoming frequent and irregular. With extended experience, he would reiterate his remarks made at a meeting last May as to the value of Bichloride of Mercury in these affections. He felt certain that he had cured many cases of diphtheritic croup by that drug.

H. N. V.

Reviews and Notices of Books.

The Elements of Physiological Physics. An outline of the elementary facts, principles and methods of Physics and their applications in Physiology.—By J. McGregor-Robertson, M.A., M.B., C.M., Muirhead Demonstrator of Physiology, and Assistant to the Professor of Physiology in the University of Glasgow. Illustrated with 219 wood-engravings. Philadelphia: Henry C. Lea's Son & Co.

The modern teaching of physiology, and especially the demonstrations in that branch, presuppose and require a considerable acquaintance with the subject of physics. There is hardly to be found a good text-book on physics for medical students which, together with the elementary facts, gives their physiological applications. That is the purpose of the above volume, which forms one of the series of manuals. It is very complete in all its parts, profusely illustrated, and clearly written. It is a good and useful book, and will add to the popularity of the series to which it belongs.

Doctrines of the Circulation: A history of Physiological opinion and discovery in regard to the Circulation of the Blood.—By J. C. Dalton, M.D., Professor Emeritus of Physiology in the College of Physicians and Surgeons, New York, and President of the College. Philadelphia: Henry C. Lea's Son & Co.

The fact of the circulation of the blood in our bodies is such an elementary one, that it requires some effort of thought to conceive or fancy what our ideas would be without any knowledge of it. And yet there was a time—all the time before Harvey—when complete ignorance on the subject was universal. The men of those days were able and cultivated men, equal, undoubtedly, in intellect to those that came after them. They were also ardent and original investigators, and yet the truth did not come to them. It is certainly one of the most interesting chapters in the history of medicine which traces out the glimmerings which the ancients had as to the functions of the

different blood-vessels and the behaviour of the blood contained therein—the various and conflicting notions upon these subjects —then leads up to the great discovery of Harvey, and shows the extraordinary opposition he met with in introducing his explanation of the true circulation through the heart, lungs and vessels. Prof. Dalton has presented to us this chapter in a most readable form. That which must have been the result of a vast amount of research is condensed within the space of a small volume. Beginning with Aristotle and his philosophy, we are consecutively introduced to Praxagoras, to the School of Alexandria, Galen, Mondini, Carpi, Vesalius, Servetus, Colombo, Cesalpinus, Fabricius, and Harvey. Amongst those of highest standing who fought the arguments of Harvey, we find Primerose, Riolan, and Bartholinus. For those wishing to follow up the subject, an appendix, giving numerous quotations and a bibliography, have been added. Every one will be interested in, and instructed by, the perusal of this admirable historical work.

A Text-book of Practical Medicine, designed for the use of Students and Practitioners of Medicine.—By ALFRED L. LOOMIS, M.D., LL.D., Professor of Pathology and Practical Medicine in the Medical Department of the University of the City of New York, Visiting Physician to Bellevue Hospital, &c. With 211 illustrations. New York: Wm. Wood & Co.

The exceeding good reputation enjoyed by the author of this work as a good observer and a sound practical physician—added to the favor with which his previous writings on medical subjects have been received—would of itself lead us to expect to find in this more comprehensive treatise the stamp of the writer's originality and industry. Nor have we been disappointed. Numerous as are the text-books on medicine at the present day, still there will always be room and a place for books such as this. Dr. Loomis, in all his lecturing and writing, is nothing if not clear and concise, and in these two cardinal virtues lies the chief merit of the treatise. The classification adopted is simple, yet not

obscure, and the separate articles are composed in such a way as to give the reader quickly the generally accepted views of the profession, along with the result of the author's own experience. Controversy and disputed points are specially avoided. It is unnecessary to say that in every case the statements are carefully made, and are in accordance with the very latest writings. The questions of treatment are brief, and to the point—never complicated or prolix. They carry on their face Dr. Loomis' practical good common sense. From a perusal of a large number of the chapters, and with the impressions formed of it as given above, it may readily be supposed that we cordially recommend this new 'Practice', and think that students will find it peculiarly suited to their wants. The illustrations are original, and assist very materially in the comprehension of the text.

Manual of Chemistry: A Guide to Lectures and Laboratory-work for Beginners in Chemistry.—By W. Simon, Ph.D., M.D., Professor of Chemistry and Toxicology in the College of Physicians and Surgeons, &c. With sixteen illustrations on wood and seven colored plates, representing fifty-six chemical reactions. Philadelphia: Henry C. Lea's Son & Co.

This is a well-arranged text-book of chemistry, both organic and inorganic. It is condensed and made specially suitable for students of medicine or of pharmacy. From an examination of its chapters, we are prepared to fully recommend it as meeting well the requirements of those for whom it is intended. It has one special feature which will no doubt tend to make it popular, viz., the plates representing the exact colors produced by various chemical reagents. These have been prepared with the greatest care, and are very beautiful.

The Elements of Physiological and Pathological Chemistry. A Handbook for Medical Students and Practitioners.—By T. Cranstoun Charles, M.D. Illustrated by 38 woodcuts and a chromo-lithograph. Philadelphia: Henry C. Lea's Son & Co.

With the author's views on the relations of this subject; on

its importance for the student of medicine ; on the difficulties in this way owing to imperfect knowledge of chemistry in most cases, as expressed in the preface, we most heartily agree. The task of writing a work that should serve as a guide for the advanced student and a book of reference for the practitioner at once complete, compact and readable, as well as suitable for use in practical laboratory work, has been so well accomplished as to render reference to foreign text-books almost superfluous. The book is in every respect up to date, including the formulæ for organic chemical compounds ; indeed, it is a pleasure to feel that the work is written by one combining the physician and the chemist. The work is so complete that few important omissions are to be noted. We should have liked to have seen an account of Landweke's method for the preparation of glycogen, inasmuch as it is so much superior to older ones, and a really good method was a *desideratum*. The general appearance and entire get-up of the book is excellent, and it deserves much consideration from different classes of students.

Books and Pamphlets Received.

A Pharmacopœia for the Treatment of Diseases of the Larynx, Pharynx and Nasal Passages. By George Morewood Lefferts, A.M., M.D. Second edition. New York and London: G. P. Putnam's Sons.

A Manual of Dissection of the Human Body. By Luther Holden. Fifth edition. Edited by John Langston. Philadelphia: P. Blakiston, Son & Co.

The Principles and Practice of Gynæcology. By Thomas Addis Emmet, M.D., LL.D. Third edition. Philadelphia: Henry C. Lea's Son & Co.

Fifth Annual Report of the State Board of Health, Lunacy and Charity of Massachusetts. Boston: Wright & Potter.

The Law and Medical Men. By R. Vashon Rogers, Jr. Carswell & Co., Toronto and Edinburgh.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, October 24th, 1884.

T. G. Roddick, M.D., President, in the Chair.

Missed Abortion.—Dr. Alloway read a paper on this subject. (*See December number, page* 257.)

Dr. Kennedy said he did not like this new name, "Missed Abortion," especially if applied to the retention of a dead fœtus over five months old. He said it was well recognized that the fœtus might die, become mummified, and be retained, or, after its death, it might be expelled and the membranes alone be retained.

Dr. Cameron also took exception to the term "missed abortion," as not being precise. He mentioned that McClintock made fun of the term by saying that when a woman went to full time it was a case of missed abortion. He prefers calling a blighted ovum a *mole.*

Dr. Trenholme said there was no question as to a dead fœtus being retained in some cases for several weeks or months. The only point was as to whether the specimen exhibited was so retained or not. The indications led him to question its long retention, and to regard it as one of a series of early abortions. In those cases of retained fœtuses which had come under his observation, he had found an abnormal condition of the decidua —the reflex decidua being distinct and separate from the uterine decidua, which is strongly adherent throughout. In this way the enveloped fœtus became a sort of tumor, frequently causing hæmorrhage, and its growth being interfered with, the subsequent death of the fœtus is due to the compressing force of the reflex decidua. In his cases he found the decidua very strong indeed, a good deal of force being required to rupture it and allow of the removal of the fœtus. Dr. T.'s theory is that there is sufficient vital union existing to prolong the retention, while the pressure is such as destroys life. It is only when the contents of the uterine cavity become separated to such an extent

that the contained mass acts as a foreign body that uterine contractions ensue. This is true whether the contents to be expelled is an early or late product of conception. The fact of the non-union of the reflex and true deciduæ accounts for menstruation during pregnancy; also for the well known fact that frequently no harm follows the use of the sound, nor even the application of remedial agents to the cavity. Of course the separation of any part of the placenta would be apt to be followed by uterine contractions.

Dr. Campbell said he had a patient with symptoms indicating treatment by means of applications to the interior of the uterus. He first passed a probe and afterwards painted with a solution of iodine and also acid. nitrate of mercury. This was done four or five times before the real cause of her trouble was found out by her aborting.

Dr. Alloway said, in reply to those gentlemen who took exception to the term "missed abortion," that if a better one could be suggested he would gladly accept it. Dr. McClintock's little joke was simply an *Irishism*, and was not intended to convey any literal meaning. Dr. A., however, drew attention to the error of confusing the terms Missed Abortion and Fleshmole. He referred to his definition of the terms relatively, as given in the body of the paper, which distinctly shewed that the term missed abortion alluded to "*a condition*," and that a mole was "*the product*" of this condition—in fact, a pathological specimen; and that the terms could not be used with any other meaning or relationship. In conclusion, Dr. Alloway said he felt much gratified with the kindness shown by the members who had discussed his paper, more especially for their complete recognition of the correctness of his views relating to this interesting subject,

PATHOLOGICAL SPECIMENS.

Dr. Sutherland exhibited the following specimens:—

1. *An Appendix Vermiformis, containing* 14 *snipe shot.*—This was removed from a patient who died of chronic Bright's disease, and who had been a lover of game.

2. *Intestines from a case of typhoid fever*, where the patient

died on the ninth day of illness, and before ulceration had taken place. The Peyers' patches were swollen and raised about a quarter of an inch. This patient was admitted into the hospital on the sixth day in an unconscious condition, and remained so until death, three days later.

3. *A Heart, showing calcification of the valves of a congenitally narrowed aortic orifice.*—Dr. Ross said this had been removed from a gentleman, a traveller, stopping at one of the hotels. He had suddenly taken ill with alarming symptoms, and was sent to the hospital. When admitted he was suffering from dyspnœa, and died shortly afterwards.

4. *Abscess of the Liver.*—Patient, a woman, was admitted into the hospital under the care of Dr. Molson, with the following symptoms: Pain and tenderness in both iliac fossæ; worse in the right. Had a quick pulse, and was suffering from dysentery. She died in 48 hours. There was a history of having had an attack of illness, with similar symptoms, about a year ago, and lasting five weeks. The *post-mortem* showed signs of an old peritonitis in the region of the right iliac fossa; also signs of recent peritonitis in right hypochondriac region. Flakes of lymph were adherent to the under surface of the liver. On removing this organ pus was seen oozing from a small opening on its under surface, where rupture had taken place. Fifty or sixty ounces of pus were removed from the cavity in the liver.

5. *Horse-shoe Kidney*, also from a hospital patient aged 32 years. The right half was healthy: left half was filled with pus. A large calculus in the pelvis blocked the exit of urine; several smaller calculi were seen in the calyces. The microscopic appearance of the right kidney was normal. Both lungs were riddled with cavities. This patient had been admitted with phthisis. On admission, the urine contained 50 per cent. of albumen. There was excessive pain in the left lumbar region, with frequent micturition. At first he passed large quantities of water, it became less, and, during the last 36 hours, scarcely any came away.

6. *Pyo-pneumo-Thorax, showing ulceration from a large lung cavity into the pleura.*—This specimen was removed from

a man aged 27, admitted into hospital August 1st, 1884. He was a stonecutter, of steady habits, a moderate drinker, and belonged to a phthisical family. He had typhoid fever eight years ago; had coughed and expectorated ever since. He had failed rapidly during the last seven months, and had suffered with severe cough, fever, and sweating. Four days before admission he took a sudden sharp pain at the left apex, and, shooting downwards, was accompanied with great dyspnœa. There were now present signs of softening tubercular deposit in the right lung; the left was loudly tympanitic, with feeble amphoric respiration. The heart was pushed to the right. Whilst in hospital there was extreme dyspnœa (orthopnœa), with irregular hectic fever and profuse sweating. On Aug. 5th, distinct succussion sounds were heard; breathing amphoric, loud and distinct to the base. Dulness up to the tenth rib on leaning back; loud, clear resonance down to twelfth rib leaning forwards. This condition persisted till death took place from exhaustion on the 17th September.

Special General Meeting, Oct. 31, 1884.

T. G. Roddick, M.D., President, in the Chair.

This meeting was called to consider Dr. Tuke's report on the Insane Asylums of the Province of Quebec, and generally to discuss the treatment of the insane in this province.

Dr. Campbell, who opened the discussion, strongly denounced the present farming or contract system, and deplored the lack of skilled medical treatment in our asylums.

Several resolutions were read and spoken to, Drs. Trenholme, Shepherd, Kennedy, Geo. Ross, Reed, G. T. Ross, Cameron, McConnell, Mills and the President taking part.

The following are some of the chief objections mentioned by the speakers to the present system of managing the insane poor of this province: That it led to cheap everything—attendants, care, fare, etc.—and to an entire absence of skilled medical treatment, which latter want resulted in a minimum of cures and the excessive use of mechanical restraint.

Dr. Cameron read portions from the Lunacy Act for the Prov. of Quebec, passed last June, and which he characterized as being very loose, incomplete, and apparently drawn by an amateur. No blame was attached to the ladies of the Longue Pointe Asylum or to Dr. Henry Howard, the onus being placed on the Government.

Dr. Henry Howard, who was not present, sent a written communication criticising Dr. Tuke's report and expressing his disapproval of the contract system.

A committee was formed to draw up resolutions embodying the sentiments expressed at this meeting, which resolutions were to be forwarded to the Government. (These resolutions appeared in the November number of this Journal.)

Stated Meeting, Nov. 7th, 1884.

T. G. Roddick, M.D., President, in the Chair.

Dr. Alloway exhibited the following Pathological specimens:

1. *A Fœtus of two months*, complete in its sac.

2. *A Fœtus three months old*, shewing arrest of development of the abdominal walls, and through which opening the bowels protruded.

3. *A Fibroid growth the size of an almond*, removed by him from the anterior wall of the vagina, just inside the introitus. The woman had suffered from hæmorrhages, and her health was broken down, largely, no doubt, from septic poisoning, as the little growth was sloughing. Since its removal the hæmorrhages have ceased, and the patient's health has very much improved.

Dr. Trenholme exhibited a *pair of Ovaries* removed by him the day before from a woman aged 28 years, who has suffered from pelvic distress since she was 14 years old. Six years ago she had a child, after a difficult labor, from which time her sufferings have been worse, quite incapacitating her from her duties. On examining her he found in Douglass' fossa a tumor which he took to be a diseased and enlarged right ovary, and decided to operate. On opening the abdomen, the left ovary was also found to be enlarged to about the size of an egg and

filled with fluid. It was first removed, along with its tube. Much greater difficulty was experienced in removing the right, as it was firmly fastened down in Douglass' pouch. It was about the size of a large walnut, and filled with pus. Dr. Trenholme said the patient was doing well; pulse 82, temperature normal.

Perforation of a Typhoid Ulcer in the Colon; Peritonitis.—Dr. Ross exhibited the specimen and related the case. The ulcer was situated about a foot from the ilio-cœcal valve. The patient was sent to hospital on the 21st day, with a good pulse, temperature 99° to 100°, the only bad symptom being tympanites. Dr. R. remarked that it was very unusual to find a perforating ulcer in the situation of this one. They are found much more commonly in the ileum. Tympanites had been a prominent symptom, and resisted all treatment. It did not arise from constipation and retained decomposing fæces, as is sometimes the case, as care had been taken to prevent this, and the autopsy showed the bowels to be nearly empty. It made the prognosis bad. The onset of perforation and subsequent peritonitis were well marked.

Dr. Trenholme asked why not perforate through the abdominal walls to let out gas.

Dr. Ross said there were no distressing symptoms present, and it was not clear that this was always a safe proceeding.

Dr. Hingston remarked that it was a common thing for a farmer to open the distended abdomen in cattle.

Sycosis.—Dr. Wood read a paper on this subject, of which the following is a brief resumé:—Much confusion has resulted from a want of agreement among authorities as to a definition of sycosis. It has been defined so as to include pustular eczema, tricophytosis barbæ, and acne indurata, and it is yet a question whether there is a disease which is distinct from these—a true sycosis. Liveing says this is a non-contagious disease of the hairy face, which is neither eczema, nor acne, nor a syphilide. The diagnosis is often difficult, but the microscope ought to discover the mycelium and spores of the *tricophyton tonsurans*, while the moist patches of eczema and the distinctive characters of acne should prevent mistakes. The affection is not common,

is usually obstinate, and only yields to long-continued and persistent treatment. Epilation and the inunction of some simple ointment are all that are commonly required. The hairs should be extracted two or three times a week, and where the pustules and tubercles are the result of the inflammatory changes incident to acne, to eczema, or to ringworm, additional appropriate treatment should in each case be resorted to.

Dr. Wood showed a patient of his recovering from a lengthened attack of sycosis.

Dr. Shepherd said it was easy to diagnose sycosis from acne and eczema, and spoke highly of Shoemaker's treatment of parasitic skin diseases with the oleates.

Dr. Blackader gave his experience in treating *tinea tonsurans* by means of oleate of copper ointment. Thirty cases occurred among the children of the Hervey Institute during the past spring and summer. Marked improvement and cure followed the use of an ointment of the strength of from 1 to 8 to 1 to 12, very little irritation being produced.

Dr. Cameron said dermatologists were finding out that vaseline, though very elegant, was not so useful a vehicle as lard for making ointments intended to cure the parasitic skin diseases. Lard, having more affinity for animal tissues, penetrates deeper. The best vehicle for oleate of copper is oleic acid. The oleic acid, of English manufacture, should first be heated, after which the oleate of copper is to be stirred in.

Dr. Hingston said it was necessary to make first a correct diagnosis between eczema and tinea sycosis. Tinea sycosis is a simple inflammatory disease, so that parasiticides were not necessary. He uses epilation of the diseased hairs only, a bread and milk poultice, and attendance to the digestion. He always cures this way, and in a few days.

Dr. Campbell had seen six cases of the parasitic form of sycosis, and only one of the non-parasitic. He had been successful in curing six or eight cases of tinea tonsurans lately with the oleate of copper ointment.

The President made a few remarks, in which he said that he had seen but very few cases of this parasitic form of sycosis.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

Fracture of the Floor of the Acetabulum.—The following is an epitome of a paper on this subject by Dr. C. C. F. Gay of Buffalo :—

This is a type of cases which fall under the observation of every surgeon, the *diagnosis* of which is very difficult to make out. The two following cases—one a case of Dr. Sands's, the other my own case—illustrate the difficulty experienced in diagnosticating this lesion. Dr. Sands styles his case a "perforating fracture of the acetabulum."

The patient, aged 66 years, had fallen in a dumb-waiter well. When first seen, the patient was suffering severely. In forty-eight hours after the injury Dr. Sands noted the facts already observed by Dr. Levings, viz. : That the limb was not shortened nor everted ; that the heel could be elevated ; the limb was capable of free rotary motion ; the trochanter described the arc of a circle, and there *was no crepitus*. Autopsy revealed the fact that the head of the thigh bone had penetrated the floor of the acetabulum, and that there was fracture of the pelvis.

My own case is reported by Dr. McBeth, house surgeon.

Ella Smith was brought into hospital April 26, 1880 ; single, American. Had been the mother of one or more children ; contracted syphilis in September, 1879. Six hours previous to entering hospital she had fallen from a verandah to the pavement, a distance of 13 feet, striking upon her right hip. Dr. Frederick and myself gave her ether and made an examination, finding slight eversion of the toe, and crepitus. There was no shortening, each limb measuring 39½ inches. We did not consider a diagnosis of intra-capsular fracture positive, but, as relief was afforded by extension, we put on extension with 8-lb. weight.

April 27th.—Patient seen by Dr. Gay, who made an examination and carefully measured the limbs, finding them the same as the night previous. Patient stated to-day that the eversion of toe was natural, having had it from childhood. There was *no crepitus*. Dressings by extension were therefore discontinued,

thus allowing muscular action to shorten the limb if there was fracture.

May 5th.—This is as early as it was deemed advisable to make further examination, on account of dysmenorrhœa, from which the patient suffered. She was etherized, and another examination made. The injured limb measured a trifle longer than the limb of the sound side; there was no more eversion and no crepitus. As the patient was somewhat relieved of pain by slight extension, Dr. Gay advised its continuance with use of eight-pound weight. For a time after this she was in a typhoid condition, and evidently suffering from septicæmia, having chills with fever, temperature reaching as high as 105°F. Tenderness over caput coli, and abdomen tympanitic. She sank gradually with little pain, and died May 19th. Rapid *post-mortem* changes.

Autopsy May 20th.—Present Drs. Gay, Diehl, Peterson and Frederick. In cutting down upon the hip, found large quantity of pus evidently from the abdominal cavity, as it could be forced through the opening in hip by pressure over abdomen. Vagina filled with pus. Found fracture of the acetabulum in three directions following the original line of union, involving fracture of innominate bone.

There is no sign in either of these reported cases that could possibly suggest the lesion revealed by dissection; therefore they confirm the correctness of statements made by writers. My house surgeon shought he detected crepitus when the patient was first examined, but crepitus was not found to exist at the examination made the next morning. It is easier to presume he was mistaken than to believe that crepitus existed. If crepitus is ever observed, it must be in consequence of co-existent fracture of the innominate bone. "There are no signs clearly distinctive of this fracture" (Agnew). If fracture of this bone can only be suspected, then diagnosis of this lesion has for the first time to be made. There is no shortening, no eversion, no crepitus, whether there be displacement of the head of the thigh bone or not; but there is pain in the hip, which is aggravated by movement of the joint, by pressure upon the trochanter, and by attempts to turn the patient upon the side. I have said

that pain is the only sign of this fracture ; it exists with equal severity with that which accompanies fracture of the cervix femoris, but without the evidence of fracture the latter reveals. Therefore, severe and persistent pain, in the absence of positive symptoms of fracture, is a sign of some significance of this lesion. Explorations through the rectum or vagina may assist in determining the nature of the injury.

Prognosis.—Fracture of the acetabulum without displacement of the head of the thigh bone does not constitute a fatal, nor even dangerous, injury, provided the lesion be early suspected and the patient let alone. Fracture with displacement is not necessarily fatal, as may be shown by the following remarkable case under the care of Charles Hewitt Moore, of Middlesex Hospital. This is the case I supposed referred to by authors :

James T. Horsfield, who died at the age of 60, was crushed about the pelvis, several years before, by a piece of timber. The left limb was shortened, and its principal motions were abduction and moderate flexion, while circumduction and extension were impossible. Dissection of pelvis : left innominate bone broken in the acetabulum into three pieces, corresponding to its original segments. These pieces were separated by the head of the femur having been driven through them into the cavity of the pelvis, where it rested upon the sacrum, below the promontory. The trochanter had worn a new socket upon the brim of the acetabulum. The right innominate bone was broken just in front of the acetabulum. Both ischio-pubal rami were broken. None of the fractures had united with ossific matter. Owing to this fact, and to the fact that the pubes had been separated from all connection with the main body of the pelvis, the former (pubes) was displaced upward (possibly by muscular action) and backward, thus materially narrowing the pelvis antero-posteriorly. The pubes was also displaced laterally—*i.e.*, somewhat twisted. As the person, in walking, bore most of his weight upon the right thigh, the corresponding ilium, which had now no support from the pubes, became bent toward the spinal column.

If recovery be possible under adverse conditions such as the report of this case reveals, no one need hereafter despair of recovery in any case.

Treatment.—But little can be said upon the subject of the management of these cases. The surgeon wants less to know what to do than what not to do. Meddlesome surgery cannot be advised. Rest of the joint is of the first importance. Whenever, therefore, a fracture is not made out, but is suspected, the patient should be let alone as much as possible, the limb left to rest in an easy position, with or without moderate extension, according as it is grateful or otherwise to the patient. In the case I have reported, it is quite probable the patient was deprived of her only chance of recovery by repeated examinations, two of which were entirely unnecessary, since they inflicted injury, without leading any nearer to a correct diagnosis.—*New York Med. Journal.*

Diphtheria Spread by Adults.—To elucidate some mooted points connected with the etiology of diphtheria, two cases are cited in which children suffering from this disease had been in the company of adults having sore throats. No permanent spontaneous generation is claimed, or has been proved, for cholera, scarlatina, or variola. Nobody looks for their primary cause in moist walls of houses ; in bad ventilation ; in the odors of hospital wards ; in putrefying kitchen refuse, or in the exhalations of sewers. But both medical men and laymen frequently regard these factors as the main and frequently the sole causes of diphtheria. While house hygiene should not be overlooked, we may live to reach the conviction that there is but one predisposing element, viz., a sore mucous membrane, and but one cause of an individual attack of diphtheria, viz., direct contagion. Diphtheria affects principally the oral and pharyngeal spaces and the respiratory organs. The size of the membrane and its seat determine the character of the disease, *ceteris paribus*. While a tonsillar diphtheria is attended with scarcely any danger, a laryngeal diphtheria destroys a child by strangulation, and nasal diphtheria by sepsis. The character of the epithelium,

whether pavement or cylindrical, the presence or absence, copiousness or scarcity of muciparous glands and lymph ducts, decide the nature of a case. It is also well known that the definition of the term diphtheria, as it does not depend upon the size or seat of the membrane, is also not limited by the character of the symptoms. A high or a low temperature, muscular or pharyngeal pain, difficulty in deglutition or articulation, sepsis, glandular swelling, may be present or absent in a case of diphtheria as long as the characteristic membrane is met with. A mild case may generate many severe ones, and a severe one need not necessarily be the source of misfortune to others. The so-called follicular tonsillitis implies a catarrhal or suppurative condition of a tonsillar crypt, or several of them. But the large majority of cases which are commonly called follicular tonsillitis do not belong to this annoying but innocent class; most of them are diphtheria. What to-day looks like a point, or four or five points, covering the outlets of ducts, may to-morrow be a confluent membrane. Diphtheria in the adult is not as rare as it is reported to be, but diphtheritic sepsis is not very frequent, as the action of the lymph system is more pronounced the younger the individual. Mild affections in adults, punctate deposits terminating in membranes on the tonsils, membranous streaks extending, vertically in most cases, over the posterior aspect of the tonsils, are frequent. A little muscular pain and difficult deglutition are, perhaps, all the symptoms complained of. The danger arising from the contagion spread by adults affected with mild forms of diphtheria is increased by the fact that in them diphtheria is apt to assume a chronic character without losing its contagious nature. Barthez emphasizes the long duration of membranes; they may last a month before being exfoliated and expelled. Cadet de Gassicourt publishes cases of pharyngeal and nasal diphtheria of 45 and 151 days' duration. The contagion spreading from such cases is of greater importance than the risk run by the individual. A family with children ought to insist upon the occasional inspection of the throats of their help; servants with chronic pharyngeal catarrh must not be hired. If there be any class of persons who are constant transmitters of diph-

theria, and require attention and caution, it is nurses and cooks—in fact, all domestic help; also sick-nurses, teachers, hair-dressers and barbers, shopkeepers, restaurant-keepers, and all those people who are in constant contact with all classes and ages. There is as much diphtheria out of bed as in bed; nearly as much out of doors as indoors. The following are the main conclusions reached: There is probably no spontaneous origin of diphtheria any more than there is a spontaneous origin of cholera or scarlatina; diphtheria is contagious; severe forms may beget severe or mild forms; mild cases may beget mild or severe cases; what has been called follicular tonsillitis is mostly diphtheria. It is seldom dangerous to the patient, as the tonsils have but very little lymph communication with the rest of the body, but it is contagious. This form is frequent in the adult, in whom it loses nothing, however, of its contagiousness. Diphtheria in the adult proves dangerous to the community mostly because it does not restrain the patient from communicating the disease. It is apt to last long: Firstly, because most cases occur on a surface covered with pavement epithelium (tonsils); secondly, because of the constant exposure and neglect on the part of the patient. Even without it, diphtheria may last weeks and more; with it, it is subject to sudden relapses. As long as it lasts it is contagious. As diphtheria is but a mild affection in many adults, who frequently disregard it, the question of transmission by means of clothing, and so forth, on the part of third persons is capable of becoming more difficult to answer than it ever was. Many a case which has been believed to be thus carried is probably one of direct contagion from a patient to a second person, from this second to a third.—*Jacobi in N. Y. Med. Journal.*

Mistaken Sex.—Dr. W. P. McGuire (*Medical Advocate*, May, 1884) reports the following case:—"A. B., 35 years of age, and in good circumstances in life, consulted me on January 12, 1884, in order to have the sex to which she belonged determined. She was to all outside appearances a fairly-formed woman about 5 feet 4 inches in height, with long hair curling down her back. Her voice and features were effeminate, and

her demeanor was modest. From birth her dress had been that of a woman. All of her associations had been with women, and her business in life that usually followed by that sex. There was no hair upon her face. He found upon examination that the formation of her thorax was similar to that of a woman, and that her breasts were developed similarly to those of a young girl. The nipple was erectile. Her arms, hands and lower limbs were like those of a man. There was a small penis in the natural position about three-quarters of an inch in length, with a well-formed glans and prepuce. It was capable of erection, but had in the glans no aperture. Following from the base of the penis backwards was a sulcus about half an inch in depth and 2½ inches in length. Lying upon each side of this sulcus, and each enclosed in separate scrotums, were two well-formed and developed testicles, each attached to a moderate-sized spermatic cord, the whole conformation resembling the vulva of the female. There was no opening in this sulcus, but just at its posterior termination was an opening one quarter of an inch in diameter, which was the external opening of the urethra, extending backwards and upwards into the bladder. No prostate gland was found. She stated that all her proclivities and desires had been masculine, and admitted that occasionally in her sleep she has pleasurable sensations followed by ejaculations of a white fluid from the opening of the urethra, which was, of course, an ejaculation of semen. There was no trouble in determining her sex. She was advised to change her dress to that of a man, and to attempt to have, by a plastic operation, a new urethra made from its termination in the perinæum, along the sulcus to the glans penis, in order to produce more effective urination."

Opening of Gall Bladder and Extraction of Biliary Calculi.—Dr. Langenbusch of Berlin (*Independence Belge*, *Midland Medical Miscellany*) has recently performed this operation upon M. Eugene Anspach, the Deputy-Governor of the National Bank of Belgium, who has for many years been suffering from a collection of gall stones, which have kept him in a state of aggravated suffering, and have lat-

terly defied all measures of relief. M. Langenbusch, summoned specially from Berlin, proposed to lay open the gall bladder, with antiseptic precautions, admitting, however, that he had only performed this operation four times, and that but one of these cases recovered. M. Anspach's family and friends were much dismayed at this announcement, and begged that the operation should not be performed. M. Anspach was firm, and reflecting that without it he would not live long, and that in the meantime his life would be worse than death, decided on the operation. Even at this supreme moment the banking mind asserted itself, and M. Anspach remarked: "After all, one in four is 25 per cent., and that is a fine dividend." "You have had one recovery already, doctor," he remarked, "and I will be the second," an element of confidence which no doubt had something to do with the result. The operation was performed on the 9th of September, and 125 calculi were extracted from the gall-bladder. M. Anspach suffered a good deal, but is now out of danger and in complete comfort.

Lumbar Nephrectomy for Renal Calculus.—Henry Morris, M.A., M.B., F.R.C.S., reported before the Royal Medico-Chirurgical Society, November 25, 1884, a case in which this operation proved successful. (*British Medical Journal.*) A laborer, aged thirty-five, who had suffered from well-marked symptoms of renal calculus of the right side since the end of 1881, and had been under the care of Dr. Douglas Powell at the Middlesex Hospital, came again under treatment in October, 1883. In November, 1882, Mr. Morris had explored his kidney digitally, and with the probing needle, but did not detect the stone. On October 23, 1883, the exploration was repeated, but, again failing, the kidney was removed through the lumbar incision. The patient made an uninterrupted recovery, and at the preseut time is hard at work as a charcoal-burner—"is as well," his medical adviser reported, "as ever he was in his life, and able to work without the slightest inconvenience." The kidney excised was of normal size and appearance, and its secreting structure was found by Dr. Coup-

land on microscopical examination to be quite healthy. The organ, however, was harder and tougher than usual, and contained a rounded rough calculus, about the size of a marble. Careful daily examination was made of the urine by Mr. Paul both before the nephrectomy and for more than six weeks after the operation, so that the rapidity and power with which one kidney could take on the whole of the excretory function was shown in a table which formed part of the paper. The results were equivalent to those of a simple physiological experiment, because a healthy kidney (so far as its excreting substance went) was removed, and a healthy one was left behind. A comparison was made between the lumbar and the peritoneal methods of nephrectomy. It was shown that the arguments which had been used in favor of the peritoneal operation were more theoretical than practical; and that, if followed out, they were likely to lead to pernicious results. The conclusion arrived at was that lumbar nephrectomy was, as a rule, the better operation, though there were exceptional circumstances and certain diseased conditions in which the abdominal method was preferable. In nephro-lithotomy, the lumbar incision, and that only, ought to be employed. In judging of the condition of the kidney opposite to the one to be removed, we had to depend upon the general symptoms of the case, and upon the amount of urea daily excreted. But it was not correct to infer that the kidneys were diseased because they excreted a daily average quantity of urea even less than half the standard quantity. Persons who had long been living an invalid life, and who had lost much flesh, might, with perfectly sound kidneys, eliminate not more than from .8 to 1.8 per cent of urea in the thirty to thirty-five ounces of urine that they passed in a day.

Mr. Bryant congratulated Mr. Morris on his success, and proceeded to touch on the many interesting points in his case. In the first place, as a physiological experiment, as showing that a patient might do nearly as well with one kidney as with two. Again, the difficulty of diagnosis of the calculus, even after handling and probing of the kidney, showed that nephro-lithotomy must, in all cases, be at first an exploratory operation.

It would certainly have been better to have taken away the stone and left the kidney; hence he felt the importance of Mr. Morris's suggestion to incise the pelvis of the kidney in future cases in order to make the search for the stone more complete. In excision of renal calculus, he thought the lumbar operation preferable to the peritoneal, as giving a better access to the pelvis of the kidney, which lay behind the vessels, and was, in many cases, the most important point for incision. A more general and and more important point was, what was sufficient to justify the removal of the kidney. In pyonephrosis and hydronephrosis, he was inclined to think it was hardly ever necessary; by washing out and draining the tumour through the loin, the cyst withered, and generally a small discharging sinus was left, which was not enough to have justified a larger operation. He had himself never removed a kidney, but he had drained three fluid tumors of the kidney, with results which showed that more would not have been justifiable. In one case there was still a sinus discharging about four ounces daily, but that was comfortable and no further operation was thought of. In some cases of very slow improvement, he had at first regretted that he had not removed the whole kidney, but afterward had lost his regret on seeing them slowly recover.

Successful Treatment of Chronic Hydrocephalus by Tapping.—By J. G. Palmer, M.D., of Oakbowery, Ala.—I wish to report a case of successful treatment of congenital hydrocephalus. The patient was a negro baby, seven months old. I was called to see the child in July last. I diagnosticated the case as one of congenital hydrocephalus, and told the parents that the only hope for cure was in tapping. To this they would not consent. The accumulation continued until the head reached the enormous size of twenty-six inches in circumference—the bones of the head having become very thin by reason of the pressure from within. There was a space of two inches between the bones. The eyes were turned up under the upper lids from pressure upon the brain. In consultation with Drs. Garison and Spratling the

importance of tapping was urged and the parents consented. A small hydrocele trocar was inserted at the posterior portion of the anterior fontanelle, the head having first been shaved at the place of insertion of the trocar. The fluid flowed freely. About eight ounces were drawn off, the trocar withdrawn, and a piece of absorbent cotton placed over the place of puncture, and held in place by a piece of adhesive plaster. The bones of the head were pressed into position, and held in place by a tightly fitting bandage. Next day bandage, plaster and cotton were removed, and more fluid was allowed to drain off, though much had done so during the night by the plaster's coming off and the cotton being moved out of position. The fluid was allowed to drain off at intervals until all was removed. The child was then put upon iodide of potash, which was kept up for several weeks. The eyes soon regained their normal position. The child nursed well and fattened rapidly. There were some febrile symptoms for several days after the operation, but they soon subsided. The head is yet big from the large size of the bones, they being very thin. The bones seem to be rapidly uniting, and the child is still fattening and growing.—*Medical Record.*

Is Pneumonia an Infectious Disease?—Within a comparatively short time the literature on the infectious nature of pneumonia has grown to considerable dimensions. Most of these recent communications are of French or German origin. In England, but quite especially in our own country, original contributions to the subject continue to appear rather tardily, and, as it were, with considerable hesitancy of conviction. There can be no doubt, however, that the current drift of the most competent opinion in the profession is toward an acceptance of the specific and infectious nature of the malady. The October number of the *Revue des Sciences Médicales*, contains a good *résumé* of the entire subject in its various aspects, theoretical, clinical, and experimental. It must be confessed at the outset, that some confusion has been created by the mingling of cases well-observed and equally well-recorded with those of a decidedly contrary kind. One point is quite incon-

testable, namely, the fact that lobar pneumonia may assume the proportions of a quickly-spreading epidemic. Moreover, such epidemics are by no means of quite infrequent occurrence. Now, it is impossible to explain them through the sole agency of meteorological influences. Nor is "taking cold" an adequate explanation of the origin of single cases of pneumonia. If, therefore, we can dismiss cold, if we accord to hygienic conditions, acclimatization, and general surroundings only their proper share in the etiology of the disease, which is the production of predisposition, then we must seek for other causative agents. Something outside of the body must, after entering the organism, be capable of suddenly setting up a typical disease, with a well-marked natural history. The assumption of a specific microbe is a very natural one, and the discovery of the same and its repeated observation by competent physicians are already matters of record. When the question is put: Is pneumonia directly transmissible from man to man? clinical experience answers that the contagion of the disease must be a feeble one. In this respect the pneumonia microbe would seem to resemble the supposed germ of malaria in manifesting the properties of a telluric poison.

This part of the question is still quite obscure, which is due in no small measure, perhaps, to insufficient knowledge concerning the micrococcus of pneumonia. Friedländer, Talamon and Fränkel each claim that their particular bacterium is the true pneumonia producer. But it is well to remember in all such contentions, that it has yet to be shown that pneumonia may not arise from various kinds of microbes. This brings us to the question of the unity of the disease. And here again we are met by strongly opposite views. Thus, at the recent German Medical Congress, Jürgensen and Fränkel upheld it, Friedländer doubted it, while Rühle, Bäumler and Rosenstein emphatically denied it. Secondary inflammation of the lungs should certainly be distinguished from the primary variety. For the acute lobar pneumonia of asthenic type can hardly be considered to be identical with those asthenic forms that so frequently complicate typhoid fever, chronic nephritis, or cerebral disease.

Again, the unicist view is not upheld by the clinical history of the disease as well as it might be. The physical signs may be the same in all cases of pneumonia. Yet that merely shows that there is fibrinous inflammation in the lungs. Now, it seems that the pulmonary parenchyma responds to irritation in a certain way, just as mucous tissue does. But we should not, therefore, conclude that there is only one cause which sets up this reaction. Pathological identity of lesion should not be used as an argument in favor of identity as regards etiology. There are pneumonias and pneumonias, just as there are different kinds of catarrh. For the present, therefore, it seems best to distinguish two principal varieties of pneumonia, and to call one simple, the other, specific pneumonia.—*N. Y. Med. Record.*

Sleep, Trance and Death.—Occasionally we meet with instances in which death is simulated by some deep degree of stupor. The case of a laborer, living at Bridgewater, which was lately recorded, appears to have been one of this kind. The trance-like state developed quite suddenly, and was mistaken by the relatives for death. Some slight degree of warmth in the apparent corpse induced the clergyman in attendance to refuse burial in spite of the decided wish of the relatives that it shoult take place. After eight days, the signs of animation were re-established, and the subject of this singular experience slowly recovered. In all such cases, there is an element of mystery ; and one cannot always decide how much of this is due to physiological or pathological conditions, or to some external agency. The *British Medical Journal*, in commenting upon the above case is led to make the following remarks : " The relationship between sleep, ' the cousin of death,' and death itself, is probably real as well as apparent. The distance which separates them is great, but there are intermediate connections, grades of dissolution as of development. Among these the similar states of trance and hibernation are worthy of special notice. For sleep and for trance one cause, the exhaustion chiefly of nervous matter, but more or less of every organ and tissue, is assignable. The hysterical stupor is the sleep of nerve

centres, worn out with the assault and conflict of stormy reflex action. Healthy sleep is the rest of physical elements wearied with the same strain applied more gradually. Cases have been recorded in which somnolence, continuing for days without cessation, has resembled trance in its duration, while preserving all the ordinary features of natural sleep. Various facts support us in associating the hibernation of animals with the same train of organic or functional changes as the other unconscious states which we have been considering. It comes like a habit; it has, one may say, annual return; its apparent cause is the oppression of external cold, and the animals it affects are mostly those which, from their bodily structure or habits, are subject to great periodic variations of temperature. Vital tissue is exhausted, and function is in part suspended, probably because the numbness of cold has taken hold upon the radicles of the outer circulation, and of that of the brain-surface which is connected with it by numerous anastomoses. In such a case anæmia would seem to be the cause of the winter sleep, as there is evidence to show that it is also the cause of that temporary starvation of brain which lulls without arresting its action, in the natural repose of each night. We may even regard the lethargy, ended by death, into which man falls when exposed to great cold, as a short and mortal hibernation. The same influence acts upon him as upon the bear or fish, but the power of its shock is greater on his finer and less accustomed senses than on their comparatively coarse organization. So, likewise, in other regions and forms of life, in the weariness, paralysis, atrophy, and gangrene of limbs, in the leafless hibernation of trees, and in their decay, beginning in the terminal twigs, the same teaching is evident, that vascular nutrition, in its periodic variations, is the parent of activity, and of rest, as its absence is of death." *N. Y. Med. Record.*

Charcot's Joint Disease.—A very important discussion of this subject has recently occurred at the London Clinical Society. The names of the prominent men who participated in the debate are a sufficient assurance that the ques-

tion was illuminated with the light of the best minds of the profession. The general tendency of the meeting was to consider the affection not as a distinct disease, but rather as a form of chronic rheumatic arthritis occurring in patients with locomotor ataxia. There was a disposition on the part of the surgeons present to regard the nervous theory of its production as rather an imaginative way of explaining a gross surgical condition. Professor Charcot was invited to be present at the discussion, but was unable to attend.—*N. Y. Med. Journal.*

Contribution to Jacksonian Epilepsy and the Situation of the Leg Centre.—Dr. William Osler, of the University of Pennsylvania, records, in the January issue of the *American Journal of the Medical Sciences*, the history of an instructive case of Jacksonian epilepsy, the main points of difference between which and true epilepsy are, the slow onset, local in character, beginning in, or in mild attacks confined to, one limb or a single group of muscles; the gradual extension until the side is involved, or, in severe attacks, the entire body; loss of consciousness late, not early and sudden, as in true epilepsy; and, lastly, the muscular contractions are clonic. His case lasted over fourteen years, the convulsions beginning in the left hand, at first monobrachial, then extending to the leg, afterwards becoming unilateral, and finally general; at first without loss of consciousness. For the first nine years of the illness, there were remarkable intermissions, lasting for six or seven months, once an entire year. Six years after the onset the left leg got weak and stiff. For four years, the tenth, eleventh, twelfth and thirteenth of the illness, the seizures were frequent. During this period there were six weeks of unconsciousness in which the spasms were very frequent, fifty to eighty in the day. Ten months prior to the final attacks there was freedom from convulsions. The intellectual faculties were unimpaired.

The case is unusual in the limitation of the lesion to the ascending frontal convolution and to its fasciculus of white matter, scarcely involving the gray substance which is commonly affected in cortical epilepsy. The accurate localization

and the remarkable absence of tissue changes in the immediate vicinity give the case the nature of an exact physiological experiment. With this limited lesion of the motor area there was permanent paralysis with contracture of one extremity and epileptiform convulsions. Another feature of interest in the case is the light it throws on the situation of the leg centre. The fibrous mass was situated entirely witin the anterior part of the paracentral lobule limited in extent, confined chiefly to the medullary fibres of the superior frontal fasciculus, and only touched the gray matter in places. A point to be referred to is the absence of the paralysis of the leg for the first six years, for, if the convulsions and monoplegia were caused by the same lesion, how explain the late onset of the latter? From the fibroid state of the tumor it might reasonably be inferred that it was originally larger and had shrunk, but the absence of puckering on the suface and the way in which the margins merged with the contiguous parts make it probable that the growth was always small, so small in fact that at one period of its development it may have caused sufficient irritation to induce the convulsions, and yet at the same time not involve the special fasciculi of white fibres to the extent of producing weakness of the leg, or monoplegia.

An Obscure Case of Popliteal Aneurism Simulating Sarcoma.—The diagnosis of popliteal aneurism is not generally a matter of great difficulty, still some of the csses of aneurism simulate other diseases so closely that mistakes are occasionally made. Many able surgeons have opened aneurisms, supposing them to be abscesses; and others, again, have tied the femoral artery for malignant growths, mistaking them for aneurisms. There are not a few cases recorded where an old consolidated aneurism has been mistaken for a sarcomatous tumor. In the January issue of the *American Jour. of the Medical Sciences* Dr. F. J. Shepherd of Montreal reports an obscure and instructive case of popliteal aneurism, which was under observation for several weeks, and in which there was a total absence of aneurismal symptoms, and the rational symptoms

pointed to sarcoma, either of the periosteum, or the parts about an old popliteal aneurism, for which the patient had been successfully treated some years before. Amputation was performed, and an examination of the tumor showed it to be solid throughout and composed of fibrin, solidified *en masse*. The orifice of the aneurism was at the distal end of the tumor, and the blood therefore flowed from below up, with, of course, a lessened stream; the circulation, owing to the obliteration of the femoral above the tumor, being carried on by collateral branches. As there was no cavity in the tumor, the absence of pulsation and bruit is explained. As there was not a single symptom which pointed to aneurism, an accurate diagnosis seems to have been impossible.

Fatal Puerperal Infection in the Male. Dr. Gandor reports this case in the *Revue de Médecine*, Nov. 9, 1884: A healthy man waited on his wife after her confinement. The woman died of puerperal septicæmia; the man developed a lymphangitis, preceded by chills, simultaneously, in one arm and leg. Soon all the symptoms of septicæmia appeared, and the patient rapidly sank, but rallied at length and made a tedious recovery. No wound or scratch of any kind had existed on his hand or foot to account for the origin of the lymphangitis. The author concluded, therefore, that the case was one of puerperal infection in the male. But he fails to explain in what manner the poison entered the system.

Intermediate Hospitals for the Treatment of Acute Mental Diseases.—The nervous system has of late years claimed the attention and study of the best medical minds of all countries, and it is now an evidence of a still further progress in this direction, that mental diseases are no longer allowed to remain in the hands of asylum-superintendents, but are beginning to demand the care and investigation that they undoubtedly deserve from a larger and more active class of specialists. It is by the medium of this development that Dr. John Van Bibber, of Baltimore, has been led at various periods, during the past five years, to investigate the plan of

treatment and the management of insane asylums, both in this country and in Europe, the results of which are given in a most interesting paper in the January number of the *American Journal of the Medical Sciences*. It is a curious tradition, which is blindly accepted by most people, that insanity differs entirely from any other form of disease, that it must be removed from sight, and if possible, from remembrance, and treated only by medical men who live within the walls of an asylum, and devote their lives to the care of this class of patients. No less is it a matter of general belief that the institutions in which this malady is treated are not hospitals, but asylums, that their use and purpose, though known, are in some way mysterious, and that their existence stands outside and apart from the ordinary ministrations of men.

This uncanny reputation is clearly the result of prejudice, and to some extent the result of the present system of treating and caring for a most unfortunate class of sufferer. It is the remnant of that feeling which, years ago, built prisons for the safe.keeping of lunatics, and which employed chains and manacles in the treatment of their disease. We have developed safely beyond that dark period, and, with rare exceptions, we have even passed the epoch of restraint.

But there are other changes which are as necessary and imperative to secure the better and more successful treatment of cases of acute insanity. These changes must affect many of the characteristic arrangements of insane asylums, the medical officer in his double rôle of physician and superintendent, and the crowding of large asylums with acute and chronic cases. This reform must also bring about the establishment of intermediate hospitals for the treatment of acute cases, and the gradual development of large asylums into homes for incurables and chronic cases.

These points Dr. Van Bibber ably discusses separately and in detail, and he comes to the conclusion that many of the evils to be complained of in our asylum system arise from the unwise association of the curable with chronic cases, and the remedy is to be found in the establishment of the intermediate hospital which is to stand between acute insanity and the asylum. This

is the hospital which is to develop the ambition of the specialist, which is to enlarge his horizon, and to bring him out of an asylum into the active world of thought and progress. This is the hospital which is to teach the treatment of insanity as it has not yet been taught, and to educate, under active clinical instruction, the men who are to be the guardians and promoters of a most important reform. The possibility of making a hospital and a school out of what has been heretofore an asylum without educational power, or without the means of using valuable clinical material, is a proud future to look forward to. It means much to the profession. It is of deep significance to the public. It means an assurance that patients confided to the care of the intermediate hospital are to have every advantage of active treatment and good nursing. It means a course of treatment which will divert and distract the patients as much as possible from their sufferings, forcing them by activity to brood as little as possible over the dreary melancholy of their disease. It means the exclusion of every factor that can militate against the recovery of a patient, and the least possible detention after recovery.

The Diagnostic Value of Tubercle Bacilli in the Urine.—So difficult is the positive diagnosis of tubercular disease of the kidney and urinary tract, that, where tuberculosis of the lung does not co-exist, it has frequently been regarded as impossible. A further contribution to our knowledge of the subject recently appeared in the *Pester Medico-Chirurgicale Presse*, No. 39, 1884. Dr. Arthur Irsai claims that the presence of Koch's bacillus in the urine establishes beyond question the diagnosis of urino-genital-tuberculosis. He gives two cases in illustration of his views, in both of which the bacillus was found in the urine by the method of Ehrlich. The autopsies showed tubercular deposits in some portion of the urinary system. In one case there was also phthisis, and bacilli were found in the sputum a month before death. Here the symptoms had pointed to a cysto-pyelitis, but the excessive loss of flesh and strength caused suspicion of a severe disease of the urinary organs. This was confirmed by the discovery of the bacillus in the urine.—*N. Y. Med. Record.*

CANADA

Medical and Surgical Journal.

MONTREAL, JANUARY, 1885.

HYDROCHLORATE OF COCAINE.

The *hydrochlorate of cocaine* seems to be holding its own as a local anæsthetic. The ophthalmic surgeons are those, however, who still find it most serviceable. It has failed in a few instances, but this was probably due to deterioration of the solution from age. This might readily be avoided by keeping on hand only as much of the solution as is required for immediate use.

Our friends the gynecologists are employing it largely in the removal of small painful tumours about the vagina and urethra, in cases of abscess, and where minor operations of any kind have to be performed in nervous hysterical women. A writer in one of our exchanges (*N. E. Medical Monthly*) speaks highly of its use in a case of painful menstruation, where before he was obliged to administer morphia hypodermically. He saturated a small piece of cotton with the solution and applied it against the os by means of a speculum. The pain ceased in half an hour, not to return, while the menses began to flow in three hours after the application was made. The editor of the exchange referred to, in a similar case, applied several coats of a four per cent. solution by means of a camel hair brush, and then hastened the drying process by blowing into the vagina with an ordinary hand bellows. The pain here also shortly subsided and the menses came on in four hours. We have not yet heard of its employment in vaginismus, but we can well imagine of what immense service it would be in this painful and troublesome complaint. In the case of the newly married it will be found often of great value, preventing the necessity for calling in

foreign aid in the shape of thumbs and speculum. The chapter of accidents described so graphically in a recent number of the *Medical News* by Dr. Egerton Y. Davis, as having occurred in his quiet home at Pentonville, might have been easily avoided by the previous application of a small quantity of the four per cent. solution of the new local anæsthetic.

In genito-urinary surgery in the male also, the muriate of cocaine is largely used. By previously injecting the urethra with the solution, catheterization is made less painful. In the case of painful and multiple chancroids where the application of nitric acid or other strong caustic is demanded, it is recommended to paint these previously with the solution, as the subsequent pain is thereby deadened if not entirely prevented. To facilitate the removal of venereal warts the new anæsthetic will be found also of service. Its use hypodermically has not yet been much practised. In a letter published in the *New England Medical Monthly*, Dr. J. W. Wright describes the removal of a small fatty tumour from his own forehead, the anæsthetic employed being the one at present under discussion. Six minims of a two per cent. solution of the cocaine were injected hypodermically in the immediate neighbourhood of the tumour. This was followed in two minutes by a sensation of numbness. Then in ten minutes more a second quantity of four minims was injected and which was scarcely felt. "Five or six minutes later Dr. Weir began the operation which was practically painless, the only sensation being a slight pain at the first incision like a pin scratch or less. I could feel the tension as he pulled, and hear the grating sound of the cutting, but felt no other pain." The incision made was about an inch and a half in length. Such scientific testimony as that given by Dr. Wright is of great value in assisting the profession to arrive at definite conclusions regarding the various actions and methods of application of this remarkable drug.

THE UNDERGRADUATES' DINNER.

[We regret that we were unable to publish the following report in our last number.—Ed.]

The Undergraduates in Medicine of McGill University held their annual dinner at the Windsor Hotel on Thursday evening, December 4th. About 140 men were present, including many members of the Faculty and University officials, and distinguished guests.

The chair was occupied by Mr. Harkin, who, in an amusing introductory speech, traced the history of dining from the primitive *al fresco* repasts of the Garden of Eden to those of the present day, with an exhaustive treatment ef the archæology of gastronomy.

After the loyal toasts, the second Vice-Chairman, Mr. A. D. McDonald, proposed *The University.*

The Principal, Sir William Dawson, who, upon rising to respond, was enthusiastically received, alluded gracefully to the programme and to the quotation opposite the name of the toast, "Thanks for the lessons of this spot" (*Wordsworth*). He would divide his remarks into two heads as to the lessons to be learned—viz., those of the classes, and those which might be gained from the dinner. As to the former, he would ask what did the University expect of the Undergraduates, and what the Undergraduates might expect from the University. The *Alma Mater* said to them in her generosity, take as much as you like; she expected them to make good use of their opportunities. The interests of the University and her Undergraduates were identical. The latter were the hope of the University; on their example much rested. Every man who distinguished himself was a builder up of the University. From their venerable Chancellor to the youngest Undergraduate their interests were the same—to keep forward and build up old McGill. He would say a word as to the lessons of the dinner. He thought it would be a good thing if the Undergraduates could dine together oftener, and this brought him to thoughts of the necessity of a dining hall. He hoped they would get that greatly to be desired

advantage ; they would have to get it sooner or later, and the well known perseverance of McGill towards the attainment of her needs would yet result in the gratification of their wishes and their wants in this respect. With a few remarks in warm commendation of the work of lady students, Sir William closed, sitting down amid another warm outburst of cheers.

The Dean and Professors was given by Mr. R. T. Irvine in a short speech, expressive of the esteem and veneration entertained by the students for their teachers, and bestowing a well-earned enconium upon labors which, he feared, obtained scarcely a tithe of the praise they deserved.

The heartiness of the cheers that greeted Mr. Irvine's speech testified to the sincerity of the undergraduate feeling toward their professors.

Dr. R. P. Howard, Dean of the Medical Faculty, in reply, thanked the students for their cordial reception of the toast, stating his conviction that it was no conventional tribute born of the occasion, but the expression of a regard that had evolved into an affection, based upon the mutual interests of professors and undergraduates. The interests of the professors, he said, were to give the best foundation in medical science to their pupils, to enkindle in them a love of learning for its own sake, and to inculcate those higher principles by which men of science should be actuated ; and that the interests of the students consisted not only in individually availing themselves of these advantages, but to co-operate in maintaining them by perpetuating the dignity and importance which has always characterized McGill, and that standard of excellence, both among professors and undergraduates, which had made the University what it is, a result obtainable only by co-operation. Let them strive to make the possession of a McGill degree as enviable a passport to society as the magic *Civis Romanus sum* of the Romans. In an eloquent reference to Dr. Osler's departure, he expressed his sorrow for a loss which no one could appreciate so fully as himself, a loss which, however much may have been professionally repaired by his able successor, could never be personally compensated for. After an allusion to the project of a Univer-

sity dining hall, mentioned by the Principal, and pledging his assistance to the scheme, the Dean took his seat amid prolonged applause.

Professors Girdwood, Shepherd and Wilkins, and Dr. Mills, also responded.

Mr. J. W. McMeekin proposed, in a humorous and loudly-applauded speech, the next toast, that of *Our Hospitals*. In eulogizing the advantages of the Montreal General Hospital, " where," he gave as his serious opinion, " many patients got better in spite of the treatment," he called attention to the many and marked improvements recently added to facilitate the courses in clinical medicine and surgery.

Mr. Andrew Robertson, in response, regretted the insufficient accommodations for patients in the General Hospital, but announced the news that a site has already been obtained for additional buildings which, after certain pecuniary obstacles had been overcome, might be soon expected to supplement the existing ones. He hoped that the higher education of women would have a beneficial effect in producing a superior class of nurses.

Sister Universities was then given in a short speech by Mr. H. E. Kendall, who extended a hearty welcome to such of the guests as represented other Universities.

In an eloquent reply, the Rev. E. J. Hill traced the analogies that exist between his own *Alma Mater*—Edinburgh University —and McGill. It was the pride that his fellow-students took in their University that had raised it to the standard of excellence which it occupied then and to-day; let a similar love and pride among McGill undergraduates characterize their actions towards the Canadian University. He closed by urging the necessity for a more complete pecuniary equipment of the chairs in the Medical Faculty.

Other responses were made by Mr. Gray of the Toronto School of Medicine, who attributed the cordiality of the present intercollegiate courtesies to the presence of a large number of Ontario students among the McGill undergraduates, and, after an allusion to the advantages possessed by the medical students of Montreal in the superior (?) police supervision in vogue here,

gave place to Messrs. Lyndsay, of the Trinity School of Medicine, Toronto; Houlé, Laval; Grandpré, Victoria; and England, Bishop's College.

The toast of the *Graduates* was then proposed by Mr. G. C. Stephen in a short speech, and responded to by Dr. Rodger, who contrasted the annual dinners celebrated in his day with the present one. He echoed the sentiments expressed by the Dean, that it was the duty of graduates, as well as undergraduates, to work together to promote the interests of the University, and called attention to the fact that many of the students of past times were professors of the Faculty to-day—a fact, he remarked, that should be a stimulus to the labours of all undergraduates.

Dr. Shepherd then proposed the *Class of* '85. He explained that it was a theme which he should be peculiarly fitted to do justice to, as he had been connected with that class more than any other, and, after mentioning, as a cause for congratulation, the increase, instead of decrease, in numbers which the system of a four years' course, with compulsory summer session attendance, had induced, concluded with a cordial hope that the class would "weather the March gales of 1885."

Mr. M. C. McGannon responded in behalf of '85 in an exceedingly eloquent and graceful speech. He traced the history of the class from its first year to the present day; described the aspirations with which they met together for the first time, the unanimous agreement that an M.D., C.M. was the *summum bonum*—their motives being probably as many and varied as their numbers and characters, that while some saw incident to that degree a life of ease and enjoyment, others took it but as a rung in the ladder of ambition and wealth, while others, again, for the higher reason that "nothing so nearly pertains to the gods as to relieve suffering." In proceeding with the annals of the class he alluded to its agency in rectifying the defects in the chair of Materia Medica, and made a touching reference to the loss that the Faculty had sustained in the deaths of two of its oldest members. He concluded by a graphic contrast between the former dinners and those of the last three years, upon which the Faculty have shed the lustre of their presence.

The *Freshmen* were then proposed by Dr. Stewart, and their importance to the college as a class of the gentlemen who annually "go, to leave mama and see the show" was demonstrated. From the unprecedented numbers of the present class he augured a brilliant outlook for the prospects of McGill, and gave some good advice as to the object and direction of their reading, pointing out that it should tend to a wider knowledge of medical research than would barely suffice to enable them to scrape through their examinations.

Mr. Holden responded to the toast. After returning thanks for the complimentary reception of the toast, he expressed the feelings of all the students present, we are convinced, by a strong advocation of the merits of a University Dining Hall, the want of which, he contended, robbed the daily intercourse of students of much of that sociable character which it should possess. After a passing tribute to the advantages to be gained from a more decided interest in college sports, especially football, and also from the Medical Society, he referred to the lack of interest which appeared to be taken in the College Journal, a neglect which he advised the students to rectify.

The toasts of the *Ladies* and the *Press* were then duly honored, and a very successful entertainment was brought to a close.

—The well-known and justly celebrated physician, Dr. Fordyce Barker, of New York, has recently been subjected to considerable annoyance at the hands of certain members of the Academy of Medicine, of which he happens this year to be President. The charge made was that he had been in the habit of signing himself "M.D., Paris, 1845," and that he had sworn falsely to that signature, having no right to the title. Dr. Barker proved, however, most conclusively that while in the midst of his examinations in Paris in 1845, he was called home owing to the alarming illness of his wife's mother. He had done so well, however, that Prof. Orfila, Dean of the Faculty, informed him that a diploma would be forwarded to him. It was lost sight of, however, till 1861 when his friend Trousseau looked the matter up and found the missing parchment in the office of the Minister of Public Instruction. Fortunately a number of

Dr. Barker's personal friends saw and examined the diploma after its arrival in New York, because by some misadventure this with other valuable papers was lost in the following year when moving from one house to another. Although over twenty years had elapsed, two of Dr. Barker's friends who saw the diploma, Drs. Smith and Doremus, could recall many of the facts and circumstances connected therewith, and both declared positively that the date of the diploma was either 1844 or 1845. Dr. Doremus was struck with the name of Orfila on the diploma because he was so familiar with it in his toxicological studies. The committee, after a lengthy and impartial investigation "decided unanimously that the charges were not sustained."

This attack is an outcome of the unfortunate Code troubles of a year ago. The amount of venomous spite and undying malevolence which these seem to have worked up in the bosoms of certain of the leaders on that occasion appears absolutely incredible. However we trust that this is an end of such baseless slanders, and meantime we take the opportunity of congratulating Dr. Barker heartily on the handsome vindication he has received.

—We have received the prospectus of a new medical monthly called the *Annals of Surgery*. It is to be devoted entirely to surgery and is intended to be representative of the "Surgical thought and work of the present day." The journal will appear on the first day of each month, simultaneously in the United States and Great Britain. It is in a way a successor of that admirable periodical which appeared for several years, the *Annals of Anatomy and Surgery*. It is to be edited by L. S. Pilcher, M.D., of Brooklyn, N.Y., and C. B. Keetley, F.R.C.S., of London, Eng., assisted by a large staff of collaborateurs. Among these latter are many well-known British and American surgeons. This is the first attempt, as far as we know, to publish in the English language a periodical exclusively devoted to surgery. We wish the enterprise every success and feel sure that it will be supported by both British and American surgeons. The American publishers are J. K. Chambers & Co., at St. Louis, Mo. Subscription, $5.00 per annum.

As we proceed to press, the first number of the "Annals" has been received, and will be noticed in our next.

—The columns of our contemporary, the *Atlanta Medical & Surgical Journal*, for the past few months have afforded its readers some *lively* reading in the form of a discussion between Dr. Hammond of New York and Dr. Hopkins of Thomasville, Ga. Dr. Hopkins took a patient to see Dr. Hammond, and in the October number gave a description of the visit, mode of examination, &c., which certainly places the New York consultant in a most unenviable light. He came out also with several of the stories which are current about the doctor, and referred to his unfortunate army experiences. In the November number Dr. Hammond makes a pretty fair defence, to which Dr. Hopkins rejoins, asserting the truth of his previous statements, and using very strong language, too strong, indeed, for a man with a very good case. Indeed this Hopkins-Hammond controversy bids fair to illustrate again, as in the Hammond-Grissom quarrel, the richness of the English language in expletives and denunciation.

Obituary.

Dr. Darling, F.R.C.S., Eng., died in New York on the 24th ult., aged 82. He was born in Dunse, Scotland, went to the United States in 1830, and, after a life of some years as a tutor, studied medicine at the University of New York, where he graduated in 1842. He had previously, as early as 1824, been a student at Edinburgh, but from some cause his studies were at that time interrupted. He became Demonstrator of Anatomy at his school in 1845, and for years assisted Professors Pattison and Mott. In 1856 he went to England, passed the membership of the Royal College of Surgeons, and in 1866 passed the Fellowship, and the same year was appointed to the chair of anatomy in the University of New York, which position he occupied until his death. He was also Lecturer in Anatomy at the Vermont School. He was a bachelor, and lived a very secluded life in the rooms at the University. As an anatomist, he was a good teacher, but the science has not been much enriched by his contributions; indeed, his papers were very few. In the class-room, a great knowledge of anatomical literature enabled him to make the lectures exceedingly interesting. He had col-

lected a large and valuable museum of osteology, and his rooms reminded one of the descriptions of the dens of old 16th century anatomists. Socially, Dr. Darling was a delightful companion, and at table could monopolize, to the pleasure of all, the conversation for hours at a time. His stories of the olden days in Edinburgh, in 1823 and '24, and of Mott and Pattison in New York in the thirties, should have been transcribed. They cannot possibly be replaced now. But when the "wee sma' hours" arrived, under the genial stimuli of good toddy and good fellowship, he had, indeed, "a ready, swift and tuneful tongue," and would quote from Burns and his favorite poets in a most telling and dramatic manner. He had considerable poetic gifts, but the statement made in some journals that he was the author of the celebrated anonymous poem on a skeleton, beginning

"Behold the ruin! 'Twas a skull,"

must be erroneous, as it was found in 1807 in the museum of the College of Surgeons. He and Dr. Ransohoff of Cincinnati were the only Fellows of the Royal College of Surgeons in the United States.

—Poor Mahomed! cut off at the early age of 35, and in the very middle of his work. Usually in London a man at that age has scarcely yet been heard of, but Dr. Mahomed had been well-known to the profession for the past ten years, so rapidly did he come to the front after his graduation. Being an able microscopist he began early to do original work in connection with the pathology of the kidney, being associated latterly in this line of research with Sir W. Gull and Dr. Sutton. He also assisted materially in bringing the sphygmograph into its present prominent place among scientific instruments. He was originally connected with St. Mary's Hospital, but about six years ago became Registrar of Guy's, and later one of the Assistant Physicians. He married early in life and leaves a widow and five children apparently totally unprovided for. However, the profession in London are subscribing handsomely towards a fund, and already we notice that over thirteen hundred pounds have been raised. Dr. Mahomed died of typhoid

fever contracted in all probability when doing duty at the London Fever Hospital, of which he was one of the attending physicians.

Personal.

We have much pleasure in recording another success scored by our esteemed young colleague Dr. R. J. B. Howard. He has recently obtained the Fellowship degree of the Royal College of Surgeons, England. We congratulate him on the high position he has taken and hope he may long be spared to wear his laurels.

H. V. Ogden, B.A., M.D. (McGill, '82), has been nominated Lecturer on Materia Medica in the new School of Anatomy and Surgery to be opened in Milwaukie, Wis., next March. Dr. Ogden, when a student, gave promise of a fine career, and, we feel sure, will fulfil the expectations of his friends and prove a capable teacher.

Dr. W. T. Duncan, of Fergus Falls, Minnesota, was in the city the other day. He and his partner, Dr. McLean, appear to have the bulk of the professional work to do in that section. Being the only physicians in the place who voted the democratic ticket, they are waiting anxiously for Mr. Cleveland to move into the White House, as they expect him to do the handsome thing by them in connection with two or three fat appointments at present held by republicans. We wish the latter no harm, but we hope our friends won't be disappointed.

Dr. O. C. Edwards, our old and esteemed friend, is now here all the way from his last camping ground, Indian Head, N. W. Territories. He has returned to civilization with his family, intending to spend a couple of months. He speaks feelingly of the weather up there, the thermometer being 50° below zero when he left Indian Head. However, the cold is of that peculiarly dry character which makes it more tolerable than with us. The doctor has been studying the habits and customs of the Indians and is known for hundred of miles around as the "Big Medicine Man." He thinks the country has a great future before it.

Our recent colleague, Dr. Osler, paid a visit to his old haunts last week. His many friends in Montreal were glad to see him. He appears to like his new home, and speaks highly of the profession as a body in Philadelphia. The class of which he has charge in the University of Pennsylvania numbers about two hundred and fifty. As was anticipated Dr. Osler is much missed by the profession of Montreal, but more especially by those members comprising the Medico-Chirurgical Society. Here he was *the* pathologist, and was ever bringing forward something new and interesting in connection with that department. Having also a large clinical experience from his connection with the Montreal General Hospital, his remarks in the discussion of medical subjects always commanded attention. We notice that already he is taking a leading part in the transactions of the Philadelphia medical societies.

Medical Items.

—We note in recent exchanges four fresh cases of chloroform poisoning. Why won't you use ether?

—St. George's Hospital, London, has received a bequest of $500,000 from the late Mr. William King.

—In some districts of Russia, the number of the blind amounts to two per cent. of the population.

—In Calcutta, during the month of April, there were 486 deaths from cholera.

—A child recently born in West Troy has three perfectly formed legs, the third protruding above the right hip.

—The *Boston Medical & Surgical Journal* has changed publishers, and hereafter will be issued by Cupples, Upham & Co., Washington street.

—Dr. J. Sutherland, of Bedeque, P.E.I., reports a case of triplets. The children weighed 6, 6½ and 7¼ lbs. respectively. Mother and children all doing well.

—We regret to observe in the daily papers the announcement of the sudden death of Mrs. Gerald O'Reilly, of Hamilton. Mrs. O'Reilly was the widow of a well-known and highly respected physician of Hamilton, and three of her sons are now

practising the medical profession in this country, viz.: Dr. Chas. O'Reilly, Superintendent of the Toronto General Hospital; Dr. Gerald O'Reilly, of Fergus, Ont., and Dr. Edward O'Reilly, of the SS. *Peruvian*.

—Dr. Schweninger, Bismarck's nominee to the Berlin chair of Dermatology, seems to be having a lonely time of it, seeing that not a single student has yet attended one of his lectures.

—A Chinese doctor is practicing with great success at Deadwood. Patients come from all surrounding towns, and their remains are often sent home to their weeping friends by express.

— Dr. Meredith, Thornton's assistant at the Samaritan, has done fifty ovariotomies in the past three years with a mortality of eight per cent. He is in the habit of taking every antiseptic precaution including the spray.

—Dr. Brownlee, of Kansas, treats epistaxis after a novel and most ingenious method. He introduces a condum into the bleeding nostril by means of an elastic catheter. Then he fills the condum with ice water, removes the catheter, and closes the mouth of the bag. The cold and pressure combined never fail to arrest the hemorrhage. The plan looks to be a good one, and certainly deserves a trial.

—The unfortunate Dr. Rabbeth, who recently came to an untimely end from madly attempting to empty a trachea of diphtheritic membrane by sucking it through a tracheotomy wound, is to have a tablet erected to his memory in University College. A "Rabbeth medal" is also talked of. The desire to become immortalized is so strong in the bosom of many that we shall probably now often hear of similar cases. We warn these, however, that they all can't expect a medal or a tablet costing a thousand dollars—times are too hard.

To pass the œsophageal tube sometimes is found very difficult, and dangerous delay may often be occasioned when the stomach-pump is required in cases of poisoning. In such cases the attempt is generally made to pass the tube with the patient in the dorsal position, and its passage is frequently obstructed at some point in the œsophagus. This annoying difficulty usually may be overcome by holding the patient in the upright position during the passage of the tube. We do not know the author of this procedure, but remember having seen it successfully carried out in Bellevue Hospital, when all attemps to pass the tube, with the patient in the dorsal position, had failed.—*Chicago Medical Review.*

—The following "gem of purest ray serene" has been forwarded us from Berhampore, which, we take it, is somewhere in the Madras Presidency. It is the duty of the tahsildar (head man of the village) to send in to the collector or head officer of the district a periodical return of all diseases, births, marriages, deaths, &c., in his village. In one of these returns the collector discovered that there were no births shown and called upon the tahsildar for an explanation. He replied, "Your honour will find the births included under the heading 'Bowel complaints.'"

—At a recent meeting of the Northumberland and Durham Medical Society (*Med. Press and Cir.*), Dr. Drummond, of Newcastle, demonstrated a new physical sign which is likely to be of great diagnostic importance in thoracic aneurism. When a patient suffering from aneurism of the thoracic aorta is made to draw a long breath (inspire deeply), and then close the mouth and expire slowly through the nose, short puffing expiratory sounds are heard—synchronous with the systole of the heart—on auscultation of the trachea. Dr. Drummond believes this phenomenon to be due to the sudden systolic expansion of the sac expelling air from the chest. He has found it absent in cases of aortic valvular disease simulating aneurism.—*Louv. Med. News.*

—Dr. Oliver Wendell Holmes has been making some calculations, through which the magnifying power of the achromatic microscope may be the more clearly conceived. Estimating from the extent to which it magnifies the minutest piece of human skin placed under its lens, the man of ordinary stature proportionately enlarged throughout, would measure just one mile in height—ten times overtopping the loftiest of the pyramids and twenty times the tallest of our church spires. His weight would be sixty million tons, and he could take up the Massachusetts State House as he would a paving stone, and fling it into the waters beyond the Boston lighthouse.—*Medical Age.*

—A man went to Bristol, Eng., says a daily contemporary, to stay for a few days with some people, and especially to visit a lunatic asylum in the neighborhood, where a large concert for the benefit of the inmates was given. The visitor found the audience, with very few exceptions, intelligent, appreciative, and, to all outward appearance, perfectly sane. The person who sat next to him conversed so delightfully that he felt compelled to remark: "I beg your pardon, but you are surely not

a—a—resident here ?" To which the stranger replied meekly, " Yes, I am." " But," insisted the visitor, " you are not—you cannot be—the least mentally afflicted ?" And the other replied, " Well, I have an inconceivable predilection. In fact, you see this piece of chalk. Wherever I go I can't resist the temptation to write bad language on the walls. My keeper has nothing to do but walk behind me with a wet sponge and rub it out, but he has a hard time, for I write very rapidly. I was three damns ahead up to 7.30, and I have just written ' hell' five times on your back !"

—The conveniences of our modern inventions are, to an extent, off-set by drawbacks. For instance, the telephone with the mischievous girl at the central office. A secular contemporary reports the following case : A husband calls up a doctor and tells him his wife has " a severe pain in the back of her neck, and complains of a sort of goneness in the stomach." " She has malarial colic," returns the man of medicine. " What shall I do for her ?" asks the now anxious husband. The wicked girl at the central now switched off to a machinist who was talking to a saw-mill man about his boiler, and this is the advice which falls on the husband's tympanum : " I think she's covered with scales inside about an inch thick. Let her cool down during the night, and before she fires up in the morning take a hammer and pound her thoroughly all over, then take a hose and hitch it on the fire-plug and wash her out." The doctor and the husband do not now speak as they pass by, and the doctor has found the telephone too expensive a luxury for further continuance.

An Abbot and his Erring Parishioner.—*Lyon Médical* quotes the following edifying tale from the *Journal de Médecine de Bordeaux*. The ecclesiastics, as is well known, have fallen into the bad habit of dabbling in medicine and pharmacy, pretending to know them as well as the Gospels. An abbot named X— was lately the victim of this unfortunate propensity. One of his female parishioners, finding herself in great suffering, consulted a physician in the neighborhood, who regretted to find that she had a well-marked gonorrhœa, and accordingly prescribed copaiba and cubebs in liberal doses. Before taking *these poisons*, the fair one thought it prudent to ask the curate what he thought of them. The latter looked at the prescription and exclaimed, " Balsamics, those are used for the chest. Yours is weak. You can take them." And, generous to the last, he wrote these words across the prescription, " Furnish at my personal expense." The story goes on to say that an occasional

sly laugh is still called up at the apothecary's by a perusal of the indorsement on that prescription.

The Oyster Tumor—A New Variety.—Dr. Theobold of Baltimore reports the removal by a physician, from the nose of a lady, of a suspicious-looking mass which had apparently sloughed off from its former attachments; the supposed neoplasm being regarded as probably of a malignant character. It was examined with the microscope, and at one of the meetings of a Baltimore society, its histological characteristics, together with the clinical facts, were duly presented. An animated discussion followed, and more than one hypothesis was advanced to account for the unusual features of the case. During the heat of the debate, an inquisitive individual inspected the supposed tumor with more care than others had displayed, and announced that it was a harmless specimen of the "bi-valve" order, familiarly known as the *oyster*. It was half-digested, and had become lodged in the nose during a previous attack of vomiting. This is a forcible illustrations of discussions, "long, labored and loud," too often held over imaginary "facts."—*Gaillard's Med. Jour.*

Pathognomic Sign of Fracture of the Neck of the Femur.—Prof. Bezzi, after showing in the *Spallanzani* the difficulties and uncertainties which often attend the diagnosis of this accident, observes that at the Milan Hospital a traditional practice exists of exploring, whenever fracture of the femur is suspected, the short space between the trochanter and the crest of the ilium. In place of the considerable resistance which there is produced in the sound limb, through the tension of the tensor faciæ latæ, there is found, when the injury has occurred, a deep depression, due evidently to the diminution of the tension of this muscle, owing to the approximation of its points of attachment.

Ozæna.—Any simple treatment which is efficacious in so troublesome a complaint as ozæna is a desideratum. Dr. Gottstein (*Berlin Klin.*) believes that ozæna is due not to a congenital narrowing of the nasal fossæ, but to their being too wide. The current of expired air loses its force and becomes powerless to remove the products of secretion, which, being retained, become fetid. The author has always found a condition of atrophy and anæmia of the mucous membrane of the turbinated bones in ozæna. He has always found advantage in plugging the nostrils with cotton wool so as to allow the passage of air. Under the influence of this plugging the mucous membrane resumes its vitality, and the secretions become normal again, and the ozæna is cured.—*Cin. Lancet and Clin.*

CANADA
MEDICAL & SURGICAL JOURNAL

FEBRUARY, 1885.

Original Communications.

ON SUBSTITUTES FOR DIGITALIS.

By JAMES STEWART, M.D.,
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I.—Caffeine.

The alkaloid *caffeine* has been known to the profession for a number of years as an agent possessing more or less cardiac tonic powers. Neither it or any of its salts have come into anything like general use, however. This appears to be owing more to the very general trustworthy effects obtainable from digitalis, than from any positive knowledge that caffeine is not a powerful cardiac stimulant. The excellent results obtainable from the judicious use of digitalis in cases of heart failure were fully set forth by the writer in a lecture published in the December number of this Journal.

In the present article, it is proposed to describe the physiological action and uses of caffeine, and to compare it with digitalis. The salts of caffeine hitherto in use—the citrate and the hydrobromate—are unstable combinations, and, therefore, not to be relied on. The alkaloid itself is, on the other hand, so insoluble that it is not well adapted for therapeutic purposes. This unsuitability of the preparations hitherto in use for therapeutic purposes is another reason why this drug has not been more generally employed. Recently there have been introduced a number of new caffeine salts which appear to possess all the

advantages, with none of the disadvantages, of the alkaloid. Tanret has recently shown that caffeine is very soluble in aqueous solutions of the benzoate, cinnamate and salicylate of sodium. The first dissolves it in chemically equivalent quantities, so that the natro-benzoate of caffeine will contain 50 per cent. of caffeine. The natro-cinnamate and the natro-salicylate of caffeine each contain as much as 62.5 per cent. of caffeine. All three salts dissolve in two parts of hot water, and they remain in solution after the water cools. This discovery of Tanret's has given a decided impetus to the employment of caffeine, and already we have the published results of a number of accurate observations made with them in cases of heart failure. By far the most important observations made in the pharmacology and therapeutics of these salts is that of Prof. Riegel of Giessen. The great advantage of Tanret's salts is their stability and easy solubility. They can also be used hypodermically without giving rise to any but the slightest irritation.

Pharmacology of Caffeine.—The action of this drug on the heart is, in many respects, similar to digitalis, except that it has a more powerful action in influencing the circulation of healthy persons than the latter drug. That digitalis has very little influence in slowing the heart or raising the blood-pressure in a normal condition of the circulation is a matter of almost every day observation. Prof. Riegel has recently published the results of several experimental investigations that he made on six healthy young adults, with the view of determining what, if any, influence caffeine had on the normal circulation. In all these experiments the drug (the natro-salicylate) was administered hypodermically, in doses of 0.50 (7½ grains). In every case he found—1st, That the action of the heart was slightly slowed. 2nd, There was increase in the tension of the pulse. These effects were manifested half an hour after the injection, and lasted several hours. The slowing of the pulse generally amounted to about 10 beats per minute.

The fact, however, that caffeine has a considerable effect on the healthy circulation, does not necessarily imply that its effects on a diseased heart would be more pronounced than that of a

drug which has little or no influence in a healthy state of the circulatory organs. If we compare the action of caffeine with that of digitalis in pathological states, we shall find that the action of the latter is more marked than that of the former. The only remaining action of caffeine that lends importance to its usefulness as a cardiac therapeutic agent is its power of increasing the quantity of urine. It has *marked* diuretic powers. It acts as a diuretic, first, because it increases the blood-pressure when this is lowered; and, secondly, it has a directly stimulating action on the secreting structures of the kidneys.

It is in their actions on the kidneys that digitalis and caffeine differ so much from each other. The former acts solely as a diuretic owing to its power of influencing the blood-pressure, while the latter, in addition to this action, increases the secreting powers. When digitalis is administered to a patient with cardiac dropsy, it usually takes three, or it may be four, days before its diuretic powers are made manifest. Caffeine, on the other hand, increases the secretion of urine in a few hours. The cause of the slow diuretic action of digitalis is due to the fact that its primary action is first to increase the pressure throughout the whole arterial system, including that of the kidney arterioles, and it is not until the dilatation of the latter takes place that the urine commences to be excreted in greater abundance. To hurry the diuretic effects of digitalis, it has been proposed, when giving it in cases requiring a quick effect, to combine it with some drug that has the power of preventing the blood-pressure in the kidneys from being raised, while, at the same time, no influence would be exerted on the pressure in the arteries of other areas. Sodium nitrite has been suggested by Lauder Brunton as a drug likely to fulfil this purpose. Whether this suggestion will ever become of practical utility remains to be seen.

Given a case of asystolic from organic disease, we can rely on digitalis always (except in the very advanced cases of fibro-fatty degeneration) of doing good; but then we have often to wait three days before these results are obtained. Now, it is claimed for the new caffeine salts that they act with great

rapidity ; that, in the majority of cases, inside of six hours, they relieve the distressing subjective symptoms of cardio-paresis.

The following case, reported by Riegel, illustrates the usual action, according to him, of Tanret's salts of caffeine, when given in doses of about 20 grains in the 24 hours, in cases of heart-failure :—

The patient, a man aged 50, was admitted into hospital suffering from great breathlessness aud œdema. There was physical evidence that the cause of these symptoms was regurgitation through the bicuspid and tricuspid orifices. The pulse was 120, and irregular ; the urine contained albumen, its specfic gravity was 1018, and its quantity did not exceed 300 c.cm. in the 24 hours. After a two days' rest, without any perceptible difference in his state, he was ordered 1.00 (15 grains) of the natro-benzoate of caffeine in the 24 hours. On the following day the urine had increased to 600 c.cm., and the patient expressed himself as feeling somewhat relieved. For the following day he was ordered 1.5 (23 grains) of the same salt, with the effect that the urine had increased to 2200 c.cm., and the pulse had fallen to 88 and ceased to be irregular. The patient could now sleep in the recumbent position, which previously he was quite unable to do. The drug was then intermitted for a few days, with the result that the pulse rose to 116, the urine fell to 850 c.cm., and he was again compelled to sit up in bed. The same salt was again ordered, in the same dose, and on the day following the urine excreted amounted to 3000 c.cm. The pulse fell from 116 to 98. The discontinuance of the drug for a second time was followed by quickness and weakness of the pulse, increase of the dyspnœa, and other subjective symptoms. The quantity of urine fell to 850 c.cm. The natro-cinnamate of caffeine was now administered in place of the natro-benzoate, and with very satisfactory results. The pulse fell from 108 to 88 within the first 24 hours, and the quantity of urine increased from 850 to 2000 c.cm. The patient expressed himself as feeling once more greatly relieved.

The most pronounced action of the caffeine salts in the case related was (1st) a very considerable increase in the quantity

of urine, and (2nd) a slowing and steadying of the heart's movements. Prof. Riegel reports a number of very similar cases, where the results were invariably very satisfactory. In only one instance did it fail to produce the wished-for effect, and that was in a case where it was combined with morphia. A subsequent administration without the latter drug was followed by an increase in the quantity of the urine and a slowing of the pulse. Binz has pointed out that there exists a marked antagonism between caffeine and narcotics, especially morphia. It is difficult to explain how this alleged antagonism is brought about. It is, however, well to remember the possibility of its occurrence when prescribing caffeine. It is extremely seldom that the occasion can arise for the administration of morphia or other direct narcotic to combat the sleeplessness frequently present, and due to a failing heart. The best treatment for this form of insomnia is not a narcotic, but a cardiac stimulant like caffeine or digitalis. In other words, the sleeplessness due to ruptured compensation is best treated by an agent that restores the compensation to its previous state. When using caffeine especially, it is unnecessary to prescribe a direct hypnotic, seeing that in a few hours one may attain a better and more permanent result, because we remove the cause of the trouble.

The actions and uses of caffeine, when used in the form of the recently-introduced double salts may be summed up as follows :

1. It strengthens, slows, and steadies a weak, fast and irregular heart.

2. It quickly acts as a diuretic in cardiac dropsy, owing to its power of (*a*) raising the blood-pressure and (*b*) of stimulating the secreting structures of the kidneys.

3. It is of marked use in the same class of cases as digitalis is. It differs, however, from this drug in the following particulars : (*a*) It is less powerful as a cardiac tonic ; (*b*) It is a more powerful and prompt diuretic, and for this reason it gives relief quicker from all the troublesome subjective symptoms of cardiac failure.

It is probable that results obtainable from neither of these drugs when given singly, could be brought about if caffeine was

given first and its effects kept up until the cumulative action of digitalis could be made manifest. By combining the power of digitalis with the rapidity of action of caffeine we may get the advantages of both drugs with little of the disadvantages of either. There is no published evidence relating to these points, however.

Dose and mode of administration of Caffeine.—The dose of any of the double salts should not exceed 30 grains in the 24 hours, this quantity being equal to about 20 grains of the pure alkaloid. Usually half the above dose will answer all purposes. The double salts are prepared by Merck of Darmstadt, but have not, as yet, found their way to this side of the Atlantic. They, however, can be prepared extemporaneously. The following formula contains in each tablespoonful about 1.00 (15 grains) of caffeine :—

℞ Caffeine - - - 15.00 (gr. 225)
Benzoate of Soda, 15.00 (gr. 225)
Water, - - - 250.00 (℥viij)

The doses of caffeine (2 or 3 grains) usually ordered are quite inadequate to act either as diuretics or cardiac tonics.

(*To be continued.*)

QUARTERLY RETROSPECT OF OBSTETRICS AND GYNÆCOLOGY.

Prepared by WILLIAM GARDNER, M.D.,

Professor of Gynæcology, McGill University; Attending Physician to the University Dispensary for Diseases of Women; Physician to the Out-Patient Department, Montreal General Hospital.

Electricity in Parturition.—At the meeting of the London Obstetrical Society on April 2nd, 1884, Dr. Kilner read a paper on the use of the induced current during labor. He claimed to have observed that it relieved pain, prevented fatigue and post-partum hæmorrhage, equalized the pulse, increased the frequency and strength of the pains, and prevented vomiting. The pain from distension of the external parts was not relieved, and it had no effect on the pain of instrumental labor. In 300 cases, he had hæmorrhage only twice. But it sometimes failed to in-

crease the contractions when most needed. After its use for an hour and a half it exercised its sedative action, and no longer increased the contractions. The contractions were sometimes violent and continuous. It did not diminish after-pains.

During the discussion which followed, Dr. Playfair said he had tried it and failed to get any result worth mentioning.

Dr. Walter had used the current for more than seven years for inertia of the uterus after the expulsion of the placenta, and found it in some cases superior to ordinary means.

Dr. Murray said that if the electric current had as powerful an effect on the pains as described, the possibility of rupture of the uterus was to be thought of. He had used it for hæmorrhage, but was not convinced of any great value it might possess.—(*Brit. Med. Journal.*)

The *Treatment of Uterine Hæmorrhage* is a subject which must always be of interest to medical men. At the last meeting of the British Medical Association, Dr. Richard Richardson of Rhayader (since dead) read a paper on iron alum in the treatment of this condition. There are two iron-alums—the ammonio-ferric and the potassio-ferric. Richardson used the ammonio-ferric. He had a record of 82 cases in which it was used, without a single failure. Of these there were: menorrhagia, 10 cases; metrorrhagia, 18; abortions, 15; accidental hæmorrhage, 7; unavoidable hæmorrhage, 4; post-partum hæmorrhage, 22; secondary hæmorrhage, 6. He claims that it is antiseptic, as he has removed the clots on the fourth or fifth day after its application, and found them free from offensive odor. It is also, he asserts, free from danger. His method is to introduce with the finger up to the os uteri, but not into it, a crystal of the size of a pea to a hazel nut, according to the severity of the case. It has the merit of being simple, and applicable without instruments or apparatus. I wish to recommend it for trial by our readers. No remedy can be more easily carried in the obstetric bag.—(*Brit. Med. Jour.*, Sept. 27, '84.)

Alcoholic Injections in Uterine Hæmorrhage.—In the *Brit. Med. Journal* of October 11, '84, Mr. Cameron of Liverpool has a note on the injection of brandy or whiskey, which he has

found to be most efficacious. He injects one or two fluid ounces with a small quantity of oil of turpentine. In the same journal for Oct. 25, Mr. Hopgood of Sunderland reports a case of most alarming post-partum hæmorrhage, in which he passed a napkin saturated with whiskey into the uterus, with immediate arrest of the bleeding. It may be well to remind our readers that vinegar is one of the best remedies for the same condition, and that it may be used in the same way either by injection or introduction of a saturated sponge or napkin.

The Management of the Third Stage of Labor.—Dr. Wm. J. Smyley of Dublin read a paper on this subject before the obstetric section of the British Medical Association. He first briefly discussed the methods of delivery of the placenta. These are mainly three—1st, The expectant method. 2nd, The Dublin method of gentle friction and pressure, and if this do not succeed very soon, in making firm pressure, by grasping firmly the fundus and pressing in the axis of the brim. 3rd, The Credé method, which consists in placing the hand over the region of the uterus, making gentle stroking movements until it is felt to contract, then, as the contraction reaches its acme, the organ is grasped in one or both hands, the fingers being spread out over it; thus its walls are squeezed together, and pressure is made towards the coccyx. Dr. S. concluded his paper as follows:—"My own belief is that a mixed method, combining the advantages of the Dublin with those of Credé's method, is the best possible. The following are the most important points to attend to: Follow the contracting uterus as it expels the child, and, by pressure and friction, make this contraction energetic and permanent. Never let it go, unless compelled to do so; and then always provide a substitute, the nurse, a friend, or even the patient herself. It is wrong to resign such a function simply to tie and divide the navel string. During a contraction, press the uterine walls together and the entire organ toward the coccyx. When sudden flattening of the uterus shows that the placenta has been expelled from it, then by strong pressure downwards drive it out of the vagina. The placenta should not be shot out upon the bed or into a vessel held against the but-

tocks, since the membranes are thereby liable to be torn across, but it should be received in the hand at the vulva, and rotated so as to twist the membranes into a firm cord, which is easily withdrawn, without, as a rule, leaving any portions behind. Should this accident, however, occur, I think it is less dangerous to leave them than to introduce the hand for their removal; but should they prove a cause of hæmorrhage, they must be taken away. Finally, I quite agree with Dohrn, Runge, and others, that beneficial as is the active method when properly employed, just so injurious is it when unskilfully carried out. The hasty and violent expression of the placenta from an imperfectly contracted or relaxed uterus is a frequent cause of retention of the membranes and portions of placenta, as well as of violent hæmorrhage and fever."

During the discussion which followed, Dr. Murphy of Sunderland spoke of the importance of the subject, and agreed with Dr. Playfair that the man who was constantly meeting with cases of post-partum hæmorrhage did not know his work. It was a lamentable fact that some men still attempted to remove the placenta by pulling on the cord, though Dr. Matthews Duncan had long ago pointed out that, instead of the placenta doubling up and emerging from the os, the centre protruding first, the placenta folded upon itself and emerged sideways. He always gave ergot a quarter of an hour before he expected the birth. He then held the uterus with his hand, followed it well down, and kept up gentle but firm pressure. To do this he got the nurse to tie the cord. The result was that he seldom saw more than a few drops of blood.

The President, Dr. Godson, considered that very different ideas were entertained as to the meaning of the terms "Expression of the Placenta" and "Expectant Method." He could not overestimate the importance of placing the hand on the uterus immediately after the birth of the child, and keeping it there if possible until the separation of the placenta. Gentle kneading of the uterus to excite contraction was one thing, and forcing out the placenta, which invariably turned the membranes inside out, with a great tendency to leave some portions behind,

was another. He objected to such a plan which could only be proper when there was hæmorrhage or inertia.

Intra-Uterine Medication.—This subject was freely discussed at the last meeting of the British Medical Association. Papers on the subject were read by Drs. Lambe Atthill and T. More Madden of Dublin, and John W. Byers of Belfast. Dr. Atthill is well known as the late master of the famous Rotunda Lying-in Hospital, the author of an admirable little text-book on diseases of women, and a strong advocate of the use of nitric acid to the endometrium in suitable cases. Though fully impressed with the value of intra-uterine medication, Atthill, like all other consultants in this branch of medicine, feels that many practitioners carry on this treatment without sufficient care in the selection of suitable cases, and omitting precautions necessary to avoid troublesome consequences. Dr. Atthill sums up the conditions in which intra-uterine medication is necessary as follows :—" All affections of local origin giving rise to profuse menstruation, menorrhagia, or uterine catarrh, or in which hyperæsthesia of the nerves distributed over the interior of the uterus exists. Polypi, or tumors capable of being surgically treated, are excluded ; but certain forms of recurrent growths, and of malignant diseases, are to be included in the category of affections capable of being benefited by this method of treatment. By the term ' local origin,' I mean all affections depending on an unhealthy condition of the uterine walls, and of the mucous membrane lining the cavity, or of that membrane alone. It is of much importance that this definition be borne in mind ; for if it be not, and symptoms, dependent for their origin on affections of the ovaries or Fallopian tubes, be treated by applications made to the intra-uterine surface, serious injury may come to the patient." Dr. Atthill uses the following agents : Borax, iodine, carbolic acid, iodized phenol, nitric acid, iodoform, and solid nitrate of silver. He uses these in the following proportion : Carbolic acid in 70 per cent., iodized phenol in 15 per cent., nitric acid in 3 per cent. The latter agent he uses less frequently than formerly. *Borax* is the least valuable—is only a mild astringent—useful when uterine catarrh continues after

more energetic agents have removed the urgent symptoms. The best preparation is a saturated solution in glycerine. *Iodine* he considers the least active after borax, whether the solution be the tincture or liniment. In this respect the author differs from a high authority—Emmet. *Carbolic acid* was first prominently brought forward by Dr. Playfair. It causes little pain when applied to the endometrium ; indeed, often relieves pain. It is a mild caustic ; causes a slough which peels off in 24 hours. It must therefore be repeated every three or four days, and continued for some weeks. *Iodized phenol* consists of a solution, by gentle heat, of pure iodine in 2 to 4 parts of carbolic acid. Dr. Battey, of Rome, Georgia, U.S., first introduced it into practice. It is one of the best agents for intra-medication—in some, the very best. *Nitric acid*, the most active of all, but causes very little pain. Its direct effects pass off very quickly, causing a superficial slough, which soon passes off. Its use requires especial care, especially in guarding the cervix by a canula of platinum or vulcanite while it is passed into the interior of the cavity ; otherwise, contraction or closure may ensue. *Iodoform*, best used in crayons made up with gum. They can be passed into the uterine cavity, and have been used in certain cases of dysmenorrhœa, but Dr. Atthill has not found the drug of much avail. It is useful in certain cases of fætid discharge from the uterus, as in chronic endometritis in old women. *Nitrate of silver* is useful in menorrhagia, depending on imperfect involution of the uterus. The writer has, however, found it useful in chronic enlargement (subinvolution and hyperplasia) with scanty menstruation. It is painful, however, and sometimes causes other disagreeable symptoms. Atthill seldoms employs it for these reasons, and that he usually succeeds by safer measures. It has, however, the advantage that it seldom has to be applied twice.

Dr. Atthill, as is well known, was formerly a strong advocate for the use of nitric acid to the interior of the uterus in all cases of menorrhagia, with an unhealthy condition of the mucosa. He now uses it quite exceptionally for such cases, finding that iodized phenol is more useful, and for this purpose he uses it by injection

with the intra-uterine syringe, using half a drachm to a drachm at a time. Dr. Atthill's conclusions on the subject of intra-uterine medication in general are as follows:—

1. Carbolic acid, in the proportion of one part of spirit to two of the acid, is the safest and most generally useful of all the agents employed.

2. Carbolic acid should always be applied by means of a probe, round the point of which a layer of cotton is rolled, the cotton being carried up to the fundus at least twice on each occasion that the applications are made, which should be on every third or fourth day, till marked improvement takes place.

3. Carbolic acid should never be injected into the uterus, except when combined with iodine, in the form known as iodized phenol.

4. In many cases, iodized phenol may with advantage be applied by means of a probe.

5. In cases in which metrorrhagia or profuse menstruation occurs, depending on an unhealthy condition of the intra-uterine mucous membrane, the cavity being dilated and the uterus enlarged, from half a drachm to a drachm of iodized phenol may be injected with great advantage.

6. In cases in which epithelioma attacks the mucous membrane of the cavity, the injection of iodized phenol promises better results than any other treatment.

7. The success likely to follow the injection of iodized phenol renders the dilatation of the uterus, the use of the curette, and the subsequent application of fuming nitric acid less frequently necessary than has been the case hitherto.

8. The injection of iodized phenol requires to be carried out with so much care, that it should never be injected except by means of a syringe which will not contain more than one drachm.

9. The use of the fuming nitric acid should be limited, as a rule, to those cases in which dilatation has been practised, and it should always be applied through a tube, inserted into the cervix uteri for the purpose of protecting the sides of the canal from the action of the acid.

10. The pain produced by the application of any medical

agent to the intra-uterine cavity does not bear any relation to the activity of that agent, but is due to one of two causes—either to hyperæsthesia or to narrowness of the cervical canal, especially of the os internum.

The title of Dr. T. More Madden's paper was *Intra-uterine Therapeutics*. After referring to the methods of dilatation, in which he expressed a preference for rapid dilatation with Hegar's, Godson's, or Barnes' dilators over tents in many instances, and to the use of the intra-uterine curette, which he believed most valuable, he spoke of nitric acid, nitrate of silver, iodoform and other remedies, and concluded by drawing attention to the danger of overlooking the great importance of the general therapeutics of endometritis, and paying exclusive attention to the local treatment. Intra-uterine disease is often related to the strumous and gouty diatheses. In such cases, change of climate, various mineral and thermal waters—chalybeate, sulphurous, iodated and arsenical—may be of great value. From long experience he could speak of the great benefits of such remedies, which do not depend alone on the actual remedial effect of the waters, but also on the moral and physical effects of change of climate, occupation, and mode of living involved in the journey to a distant watering-place. With reference to drugs, some gynæcologists are very sceptical as to any real good to be derived from them, but he believed that the subsidence of intra-uterine hyperplasia would be materially hastened in most instances by a course of perchloride of mercury in minute doses given in tincture of bark. In women, the gouty and rheumatic diatheses show themselves most generally in chronic uterine complaints, rather than in any of these external forms of the same constitutional disorders observed in men. These facts explain the efficacy of alkaline mineral waters, such as Vichy, and the utility of sodated and arsenical mineral springs, as Kreuznach, Wildegg, or Royat and Mont Doré, which he has found of signal use in arresting the course of congestive hypertrophy of the uterus in women of other constitutional proclivities to disease.

Shortening of the Round Ligaments of the Uterus.—This

operation has, within the last two or three years, been performed a considerable number of times, with a view of permanently retaining the retroverted or prolapsed uterus in position. To Dr. William Alexander of Liverpool, it would appear, is due the credit of originating this operation, which he has performed many times, and on which he has written a short monograph. Every gynæcologist is familiar with the fact that there are many cases of retroversion and prolapse which prove very unmanageable in the hands of men the most experienced; for these the operation is proposed. An incision is made over the course of the inguinal canal, exposing the external abdominal ring, where the round ligaments escape. The ligament is pulled out for some distance, the uterus being replaced. Sutures are then passed through the edges of the ring, including the cord of the ligament. By these it is retained *in situ* till adhesion takes place. At the last meeting of the British Medical Association, papers were read reporting cases of the operation by Drs. Wm. L. Reid of Glasgow and George Elder of Nottingham. Dr. Reid reports three cases, and concludes his paper as follows:—

1. It is better to use the spray, and to keep the wound aseptic until it has wholly or nearly healed. There is hardly any hope of its healing by first intention; but, if kept aseptic, it heals more quickly than it would otherwise do.

2. The loose part of the cord should not be folded up in the wound, but the greater part of it cut off so as to avoid the presence of sloughing tissue in the wound. Properly secured by sound stitches, and the uterus supported by a good pessary, there is no danger of the cut-ends being drawn into the abdomen, they being soon secured by adhesion.

3. The ends of the ligaments can be most easily reached by standing on the side on which you are operating, as the outer edge of the ring is more easily felt by the finger when one stands on the same side.

4. Contrary to Dr. Alexander's recommendation, I have found that the end of the round ligament is more easily isolated by grasping it with a broad pair of dressing forceps. The cross fibres which prevent it from running out can then be cut, or torn

gently away, one by one, until it begins to come out freely. In my second case, where the fingers were used, the ligament broke, and the canal had to be opened up before it could be again seized.

5. In this region, an elastic bandage put round the waist and thighs will be found more effective in keeping the wound aseptic than a large dressing with an ordinary flannel bandage, as the former adapts itself to the varying position of the limbs, and prevents air from being drawn under the dressings.

Dr. Reid then goes on to say :—

" Referring to the results of the cases only, it seems to me that we cannot promise much in the way of certain and immediate relief from this operation. It remedies the *position*, but not the *condition*, of the uterus. I caught at it because, although often using severe means, I have been very unsuccessful in curing chronic hypertrophy of the womb, especially when accompanied, as it so often is, by some form of displacement. The results of this operation, as I have given them, although far from brilliant, are such as to lead me to continue practising it in obstinate cases, in the hope that, the malposition being remedied, the disordered condition may be more readily subdued."

Dr. Elder's case was most satisfactory in its results. It was a well-marked case, had resisted all ordinary methods of treatment, and was completely relieved of her symptoms.

Mr. Burton of Liverpool stated that he had operated in 14 cases, and was well satisfied with the results obtained, believing that he had produced benefits not to be achieved by any other method in so short a time.

Dr. Alexander, who was also present, referred to several points in connection with the operation. 1, The ligaments were delicate structures, and difficult to find ; and operations might fail in the hands of inexperienced surgeons, from failing to catch them up properly or separate them. 2, The ligaments must be made to adhere to the parts effectually before the patient was allowed to get up. Some had objected to the long time before the patients were allowed to get out of bed. This was intentional, not dependent on the state of the wound. To allow the patients to get up earlier would have destroyed the effects of

the operation. 3, The operation was only designed to put the uterus into position and to maintain it there, and did not promise a cure to nervous symptoms supposed to depend on the displacement. Cystoceles were not cured by it; and he was very sorry that it could not cure that and all other diseases, as some seemed to think it should; but he never thought or said it would.

Dr. Godson, the president of the section, considered that the papers read showed clearly that the operation effected a cure of the displacement; but whether it did good beyond this was questionable, and it required further operations, and more time to elapse since their performance, in order to form a fair opinion regarding it. For his own part, he should wait until he was more satisfied of the benefit before he undertook the operation. —(*Brit. Med. Jour.*, Nov. 15, '84.

Correspondence.

New York, February, 1885.

In my last, I referred to the different objects kept in view by the men attending the schools for practitioners. But I omitted to mention the apparent object in view of a few select individuals. These give up for a time a large and extensive practice in a country town of two or three thousand inhabitants, and take out a course in one of the schools, for the philanthropic purpose of giving the professors and the members of the class the "benefit of their experience." But such is the depravity of mankind at the present day, that this philanthropy is appreciated by neither the professors nor the members of the class. As virtue, it is said, always receives its reward, no doubt these men obtain theirs, on their return home, when they are enabled to tell an admiring populace that they have just been to New York and have shown the profession there that all the medical knowledge is not limited to the metropolis, and that the McDowells and Kochs of country district fame have not yet all been discovered. Here let me say, however, that the teachers encourage the asking of relevant questions, and take great pains to make themselves fully understood. The greatest courtesy is

shown by the profession of New York to the attendants of either school, and all the leading societies are open to them.

One often hears, now-a-days, that the uterus is a much-abused organ, but if that organ could speak for herself I think one would hear her say that she felt herself very much neglected, and that her neighbours, the ovaries, tubes and ligaments, were receiving all the attention. She is not credited now even with an independent catarrh. This will serve as a hint to the direction in which modern pelvic pathology is tending. One specialist of note here is known by his *confrères* as the "ovarian fisherman," for he usually finds an ovary that has strayed away from its *habitat*, thus disquieting the whole pelvic household. There seems to be a pretty general feeling against the use of pessaries except in a very few cases. The treatment for displacements is principally by vaginal tampons, medicated either with glycerine alone or with alum and glycerine. These are left *in situ* for 36 or 48 hours. After removal, a copious injection of hot water is used and fresh tampons introduced. Dilatation of the internal os uteri, either gradual, by Hunt's sounds, or forcible, by Wylie's dilators, is a favourite method of treating dysmenorrhœa, with anteflexion and deficient development of the uterus. Sims' operation for these conditions is very much restricted; none but the mildest operations are now made to the uterine cavity, and that only to the cervical portion.

It may be a source of some pride to Canadians to know that one of their own number (Dr. J. B. Hunter) ranks high among the most eminent gynæcologists in this city, and as an operator he is second to none. He has a decidedly English cast of features, which are considerably furrowed for so young a man. As a practical teacher at the Polyclinic, he is a marked success. The prominent points are concisely brought out in each case, the appropriate treatment given in detail, and, if it is of an operative nature, fully and clearly illustrated on the blackboard. He is awake to the necessity, which some of the other teachers are not, of teaching men the use of instruments, getting the patient in the proper position, and how to examine with as little pain as possible to the patient. His depresser, which

is a reflector as well, is the most important addition to Sims' speculum since that instrument was given to the profession. He is one of the few operators that I have seen who performs Emmet's operation on the cervix as it is done by the originator himself. I have seen a very eminent specialist do the operation in a very simple manner. An instrument shaped like a hawk's bill was made to take a piece out of the cervix on either side, and the bitten cervix was sewed together by silk sutures. The operation, which probably would have taken Dr. Emmet nigh an hour to perform, was done in less than 15 minutes. The operator seemed to think some apology was necessary for doing his work in so perfunctory a manner, and stated that one of the duties of the specialist was to take a difficult problem, work it out, and give it back to the general practitioners very much simplified. This is very true, and no one man more than Dr. Emmet has worked in that direction. But to have an operation, whose *raison d'etre* exists in being thorough, so that all the indurated and cicatricial be removed, done superficially, is merely to cast opprobium on it. Can there be anything more disheartening to a great mind who is working, and has worked, hard to alleviate suffering and benefit womankind than to have his methods misrepresented and imperfectly followed? This is not all; the very men who either misunderstand or have never learned to perform the operation rightly, are the first to cry it down and attribute to the operation the incompetency for which they are themselves to blame. It is to plastic surgery that three-fourths of the women suffering from pelvic ills have to look for relief, and because it is not so brilliant in its performance as a rapid and bold laparotomy, most men do not take the trouble to study it thoroughly and apply to it the care and painstaking that it demands. At the clinics, cases are constantly turning up that have been operated upon with only partial relief, because the operation was only partially done.

Most of your readers, no doubt, are aware that the third edition of Emmet's "Principles and Practice of Gynæcology" has just been issued. It has been thoroughly revised, many

chapters have been nearly rewritten and much new matter added. In this its improved and altered state the work forms what an eminent gynæcologist, in speaking of it to me one day, happily styled "The Bible of Gynæcology." When one sees from six to eight Tait's operations weekly, and hears of others being done, the tempting conclusion is that a new plan has been adopted to solve the Malthusian problem of the increase of mankind. But in almost all the cases that I have seen operated upon since coming here, their histories were such as to justify any capital operation that gave promise of any relief. A case in point was operated upon by Dr. B. F. Dawson, at the Post-Graduate Hospital, a short time ago. The history of the case briefly was:—Miss S., æt. 29, a seamstress, had suffered for the past three years from intense dysmenorrhœa of an ovarian character. After a time she began to grow nervous and hysterical, and for the past eight months menstruation, which was profuse, lasting from five to eight days, was accompanied by convulsive seizures. Each menstruation left her very much prostrated, and by the time she rallied the next period would recur. Dr. B. F. Dawson saw her about ten months ago, and directed attention to the ovaries, but an eminent alienist of this city considered it merely a case of hystero-epilepsy, and would on no account give his consent to a capital operation. The various remedies for hystero-epilepsy were tried one after another, but all in vain. Then treatment for ovarian neuralgia was instituted, with a similar result. The patient gradually grew worse, and the convulsive seizures became more severe. She was brought to the Post-Graduate Hospital in a very low condition indeed, very much emaciated and the pulse small, the tongue coated, and unable to talk above a whisper. This was about the time of her expected menstruation. Another menstruation with its accompanying evils would surely kill her. Dr. Dawson asked the members of the class to see the patient, with the view of eliciting their opinion as to the propriety of operating. All unanimously agreed that an operation was justifiable, and that it was the only procedure that held out a ray of hope to the patient. Tait's operation was performed next

morning, in the presence of the class, with the greatest antiseptic precautions. Very little blood was lost, and as little time consumed as the exigencies of the case demanded. The ovaries were found firmly adherent, twice their normal size, cystic, and a hæmatoma in the left one, which doubtless had taken place at the previous menstruation. The patient rallied pretty well for a time after the operation, but died on the third day in spite of transfusion and every effort to sustain life. There did not appear to be sufficient nervous power left to maintain the functions of life. There is no doubt, in my mind, had the operation been performed six months previously her life would, in all probability, have been saved, and a chapter of untold misery, not alone to the patient but to her friends, would have been averted.

Dr. Thomas, a week ago, performed at the Woman's Hospital his third operation for the removal of a sessile fibroid tumour of the uterus. It was of a similar nature to those illustrated in his work, figs. 220 and 221. The os uteri in this case was high up beneath the symphysis pubis, and to reach the tumour he cut through the posterior wall of the uterus. The operation took over an hour in its performance, and the tumour was brought away piece-meal, the spoon-saw being extensively used. It was a matter of surprise to notice the slight amount of hæmorrhage. The patient, I have been informed by the house surgeon, Dr. McLaren, is doing well.

I have received several letters asking me what I think of the Polyclinic, or Post Graduate—some of the inquirers having reference to special work. In general terms, I would say that a full course of three months in either school is useful if the object is merely " to brush up " and get all the latest hints and wrinkles. Both schools are about equally good in gynæcology. In the Polyclinic are Hunter, Mundé and Wylie; in the Post Graduate, Dawson, Skene and Bache Emmet. The methods of teaching are somewhat different, and to anyone intending to pursue this branch as a specialty, I would advise a course in each. Dr. B. F. Dawson has the happy faculty of throwing a great deal of enthusiasm into his teaching. The patient, on a table,

is wheeled into the amphitheatre, and her history read in full by one of the assistants. Several members of the class examine the patient in rotation, and each one is asked what condition he finds, his diagnosis, and the grounds on which he bases the latter. As a general rule, each man has found something different, and makes a diagnosis probably totally at variance with that of his predecessor. When seven or eight have examined, and the excitement has reached its culminating point, Dr. Dawson examines the case himself, and in a few well chosen words states the physical signs. Those who have been furthest from right are asked to examine again, and as they withdraw their fingers from the vagina an expression of wonder is painted on their countenanee that they did not detect that prolapsed ovary the first time, or called an anteflexion a retroversion. Either school has good teachers in surgery, and there are ample opportunities for seeing operations of every description at the various hospitals—one could put in several hours a day in special surgical work. Skin diseases are only fair, and are better at the Polyclinic, while the Post Graduate has the advantage in nervous ailments, having Hammond, Spitzka and Ramsay. Pathology and obstetrics are *nil*, and there are no opportunities in studying medical bed-cases owing to the hospital regulations prohibiting students from going into the wards. The Polyclinic, however, I notice, has recently begun giving medical clinics at the Bellevue once a week by Dr. Hudson. I can't speak of these personally, but I hear they are good.

H. N. V.

CANADA FIRST.

To the Editor of the Canada Medical & Surgical Journal.

Dear Sir,—I have just read in the January number of *Braithwaite*, 1885, an abstract from the Dublin *Journal of Medical Science*, June, 1884, of a paper from the pen of Mr. Macan, Master of the Rotunda Hospital, "On the Precautions for the Prevention of Puerperal Fever."

The main object of Mr. Macan's paper is to point out the great efficacy of iodoform introduced into the interior of the uterus during an attack of septicæmia, and that it has been

used extensively at the Rotunda Hospital for this purpose with the most gratifying results. I am much pleased that this form of treatment in septicæmia has been so favorably reported upon from that renowned institution, but I regret that Mr. Macan has confined the literature of the subject to himself and the Rotunda. It would appear from Mr. Macan's paper that he had originated this form of treatment, and that the fact was unknown to him that we in Canada have been using iodoform in this manner ever since June, 1882. As proof of this he will see a paper read before the Medico-Chirurgical Society of Montreal, and printed in the CANADA MEDICAL & SURGICAL JOURNAL for April, 1883, "On the Treatment of Puerperal Septicæmia *by a New Method*,—Intra-Uterine Suppositories of Iodoform." In this paper a full explanation is given of the way in which iodoform acts on the diseased parts and how it arrests the formation of virus. In this respect it is probable Mr. Macan is incorrect in attributing the sudden drop of temperature to iodoform. We have noticed the same pleasing effect, but have attributed it to the removal of residual poison from the absorbing-surface cavity by the sublimate solution, and the arrest of its further formation and absorption by the iodoform. But to stamp the drug "an antipyretic," in the same light as quinine, for instance, would be absurd. Mr. Macan will also see another *brochure* "On Puerperal Fever," read before the same society and printed in the CANADA MEDICAL & SURGICAL JOURNAL of March, 1884, in which a further record of cases is given, showing the curative effect of the intra-uterine suppositories of iodoform. Ehrendorfer of Vienna has been using iodoform in the same manner in puerperal septicæmia, but his results were also reported *after* cases had been published and the success of the treatment generally acknowledged by the profession in Canada.

Without further encroaching upon your space, sir, and with much respect for Mr. Macan's report, I think we may fairly claim for Canada priority for the intra-uterine use of iodoform in septicæmia, and for having first conceived the idea that it would prove a greater boon to humanity in this than in any of the many other diseased processes to which it has been applied.

I am, sir, yours truly,

T. JOHNSON ALLOWAY, M.D.

914 Dorchester st. W., Montreal.

Reviews and Notices of Books.

A System of Practical Medicine.—By American authors. Edited by WILLIAM PEPPER, M.D., LL.D., Provost and Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania, assisted by LOUIS STARR, M.D., Clinical Professor of Diseases of Children in the University of Pennsylvania. Vol. I—Pathology and General Diseases. Philadelphia: Lea Brothers & Co.

We are in receipt of this the first volume of the Practice of Medicine by Prof. Pepper, the announcement of which has been for some time before the profession. We take the earliest opportunity of bringing this valuable work to the attention of our readers, although, having only just received it, we have been unable to give it such careful examination as its importance and its merits deserve. This work, the production entirely of American and Canadian authors, is no doubt destined, when complete, to become the standard of American medicine, and will present a full exposition of the actual state of the knowledge of the medical art and the mode in which it is practised on this side of the Atlantic. The collaborators of Dr. Pepper include all the names which command the greatest respect and are most widely known throughout America; and the greatest care has been exercised in selecting for the various sections those persons whose previous studies and experience have best qualified them to speak with authority.

The present volume is introduced by an article by Dr. Reginald H. Fitz of Boston, on General Morbid Processes: followed by Dr. Hartshorne on General Etiology, Medical Diagnosis and Prognosis; Dr. Billings on Hygiene, and Mr. Geo. E. Waring on Drainage and Sewerage in their Hygienic Relations. Then follow the General Diseases by various authors. The section upon the fevers is written by Dr. Jas. H. Hutchinson of the Pennsylvania Hospital, with the exception of the article on relapsing fevers, which is from the pen of Professor Pepper himself. We must also specially notice the complete and exhaustive article

on Diphtheria by that able physician Dr. Jacobi of New York, and that on Cholera by Prof. Alfred Stillé. It is well known that Dr. Stillé has long been looked upon as one of the greatest American authorities upon Cholera, and this latest communication of his upon the subject will be read with great interest. Dr. Lusk contributes a very full account of our present knowledge of puerperal fever, its treatment and prevention. We recommend this work most cordially to all, believing that very soon it will be looked upon as one of the first essentials in the library of every well-informed medical man in the country. We may conclude by saying that the publishers seem to have bestowed every attention upon it, as everything about it is of the very highest order as regards proper printing, illustrations and binding.

We append a list of contributors to Vol. I :—Drs. Samuel J. Bemiss, John S. Billings, Reginald H. Fitz, Frank P. Foster, W. A. Hardaway, Henry Hartshorne, Jas. H. Hutchinson, Jas. Nevins Hyde, A. Jacobi, John M. Keating, Jas. Law, Wm. T. Lusk, William Pepper, H. W. Schmidt, Duane B. Simmons, J. Lewis Smith, Alfred Stillé, Geo. E. Waring, B. A. Watson, Jas. C. White, and Jas. C. Ditson.

The Basic Pathology and Specific Treatment of Diphtheria, Typhoid, Zymotic, Septic, Scorbutic and Putrescent Diseases generally.—By Geo. J. Ziegler, M.D., late Physician to the Philadelphia Hospital, &c. Philadelphia : Geo. J. Ziegler, M.D.

The gist of this rather extraordinary production is, that the poisons of diseases of the above classes are *alkaline*, and that it is necessary, for the thorough "jugulating of the basic etiological factor *ab origo* (*sic*)," to employ *acids*. The writer indulges largely in adjectives to describe the properties of the latter remedies. Thus they are called "disinfectant, antitaxic, antizymotic, antiseptic, antalkaline, neutralizing, resolving, and restorative." Some extravagant statements are indulged in to support this alkaline theory. Thus, tobacco is roundly accused of being a covert fiend, and capable of causing untold ills. "The nicotian miasm is sufficient to induce, both as predisposing and

exciting causes, all forms of choleraic defluxions, as it surcharges the blood and body with ammonia and other alkaline and toxic matters, enervates and depresses the nervous and general system, disorders the stomach, liver and bowels, causing dyspepsia and constipation, with alternations of diarrhœa and nausea, vomiting and purging, or cholera morbus and, doubtless also, cholera infantum, with the most severe form of malignant cholera, independent of all micro-organisms or concomitant agencies, being in itself an active *materies morti* and cause of intestinal defluxions with other colliquative affections." "The vapor and smoke of tobacco directly enters the blood of pregnant and nursing women, as of others, and causes uræmia, sickness of stomach, miscarriage, uterine hæmorrhage, puerperal eclampsia and fever, with other abnormalities, as seen in the maladies and frequent abortions, and post-partum sickness and death of the offspring of women who work in tobacco factories." Further extracts are hardly necessary to show that, not to put too fine a point upon it, strict scientific accuracy is hardly to be looked for here, and that the author's imagination has been allowed free scope. We hardly think that our knowledge has been much advanced by this exposition of Dr. Ziegler's peculiar theories.

A System of Human Anatomy, including its Medical and Surgical Relations.—By HARRISON ALLEN, M.D., Professor of Physiology in the University of Pennsylvania, &c. Section V—Nervous Diseases. Section VI—Organs of Sense, Organs of Digestion, and Genito-Urinary Organs.

These two sections complete this Anatomy which has been appearing for several years past, and are, perhaps, the best that have been issued. The illustrations of Part V (nervous system) are particularly good, and the description of the brain clear and well arranged. In the description of the liver in Part VI, we were surprised to find no reference to the investigations of Professor His in regard to the position of the liver. In addition to the description of the organs in Part VI, there is a chapter on superficial and topographical anatomy, and one on embryology

and the study of malformations. These chapters are hardly full enough to be of very much use, but are good as far as they go. At the end of Part VI there is a chapter on making post-mortem examinations, which seems to us rather out of place in a work on general anatomy, however valuable it may be in connection with other subjects. The work is provided with a good *general* index and a *clinical* index, which, for reference, will be invaluable to the general practitioner. This is the most ambitious work on anatomy that has yet appeared in America, and does very great credit to the author. The illustrations, which were rather crude in the first parts, have steadily improved. We think it a great pity that this valuable work should have been issued in such an awkward form and at such a high price. Its sale, in consequence, must necessarily be limited, as it is impossible that it can compete with the works of Quain or Gray. We should advise the publishers to issue a cheaper edition in a more compact form, if they want to make this work as successful as it justly deserves to be. We wish to offer our congratulations to the author on having produced such an admirable and complete system of anatomy.

A Manual of Dissection of the Human Body.—By Luther Holden. Fifth edition. Edited by John Langton. Philadelphia: P. Blakiston, Son & Co.

The text-books written by Mr. Luther Holden have always been well appreciated by the medical student on both sides of the Atlantic. A good anatomist and a sound practical surgeon, the author possesses in an unusual degree the art of describing in the most simple terms the most complex structures, and of illustrating with his own pencil the faithful picture drawn with his pen. It is by the possession of these rare qualities as a writer that Mr. Holden has succeeded in making the study of osteology interesting and attractive. Holden's Dissector is an old friend, grown a little stouter lately, but quite as pleasant to read and as instructive to study as ever. The old diagrams which we have so often made use of are there, together with many new ones, the latter in no point inferior to their predeces-

sors. We particularly commend the description of the brain. This chapter is well written. The complex structures are clearly described in the simplest language. We have but one fault to find—that for dissecting-room purposes the book itself is rather too large. Probably in the next edition the editor may see the advantage of dividing it into two volumes.

A Pharmacopœia for the Treatment of Diseases of the Larynx, Pharynx and Nasal Passages.—By George Morewood Lefferts, M.A., M.D., Clinical Professor of Laryngoscopy and Diseases of the Throat, College of Physicians and Surgeons, Medical Department of Columbia College, New York. Second edition. Revised and enlarged. New York and London: G. P. Putnam's Sons.

Very much has been accomplished of late years by the specialists in this department to improve our methods of treatment of the many troublesome complaints affecting those organs. The present little volume presents a careful *resumé* of all that it is desirable to know upon this subject. Full directions are given concerning the choice of remedies in the various cases and the best means of applying them. It is fully illustrated, and will form a very useful little guide and assistant to every practical physician and student of throat diseases.

A Handbook of Ophthalmic Science and Practice.—By Henry E. Jaler, F.R.C.S., Junior Ophthalmic Surgeon to St. Mary's Hospital, etc. Philadelphia: Henry C. Lea's Son & Co.

This is a neatly printed and well bound volume, with no less than 125 illustrations, some of which are beautifully coloured, and apparently very truthful. They are all the more valuable, besides, in being chiefly original, because the author, in his preface, states that the coloured plates, with one exception, have been taken from cases met with in the course of clinical work. The contents of the book appear to be arranged with considerable care and judgment. Portion of the first chapter

contains a concise description of the anatomy and physiology of the eye and its appendages. In fact, nearly every chapter which treats of any special structure is introduced by a short account of the anatomy of the part. In the treatment of conjunctivitis the author recommends iodoform and boracic acid as astringents, but doubtless they do good more on account of their remarkable antiseptic properties. A brief account is given of the treatment of granular lids and pannus by means of jequirity, and altogether the author is favourable to its employment. A chapter is devoted to the consideration of colour vision and its defects—a very important subject, and one which should engage the earnest attention of ophthalmic surgeons. The different methods of cataract extraction are well described and suitably illustrated. The appendix contains a number of useful formulæ and selections from the best types of Jaeger and Snellen. To write a book on Ophthalmology is no easy task in our day, and we therefore think that Mr. Jaler is to be congratulated on the very successful completion of his work. The volume is one specially adapted for general practitioners and students, who are always in search of something concise.

Principles of Theoretical Chemistry, with Special Reference to the Constitution of Chemical Compounds.—By Ira Remsen, Professor of Chemistry in the Johns Hopkins University. Second edition. Thoroughly revised and enlarged. Philadelphia: Henry C. Lea's Son & Co.

An excellent work by an accomplished author, having the gift of placing the subject very clearly before his readers. It will no doubt be found a useful addition to the handbooks of all students of and workers in chemistry.

Books and Pamphlets Received.

The Retrospect of Medicine. By W. Jas. Braithwaite, M.D. Vol. XC, July—December, 1884 London: Simpkin, Marshall & Co.

Hooper's Physician's Vade Mecum. Tenth edition. Revised by Wm. Augustus Guy, M.B., Cantab, F.R.S., and John Harley, M.D., Lond., F.L.S. Vol. II. New York: Wm. Wood & Co.

Elements of Practical Medicine. By Alfred H. Carter, M.D. Third edition. New York: D. Appleton & Co.

THE INTERNATIONAL ENCYCLOPÆDIA OF SURGERY. A Systematic Treatise on the Theory and Practice of Surgery by authors of various nations. Edited by John Ashurst, Jr., M.D. In six volumes. Vol. V. New York: Wm. Wood & Co.

A PRACTICAL TREATISE ON THE DISEASES OF THE EAR, including a sketch of Aural Anatomy and Physiology. By D. B. St. John Roosa, M.D., LL.D. Sixth edition, revised and enlarged. New York: Wm. Wood & Co.

INSANITY AND ALLIED NEUROSES, PRACTICAL AND CLINICAL. By George H. Savage, M.D., F.R.C.P. Philadelphia: Henry C. Lea's Son & Co.

INTESTINAL OBSTRUCTION: Its Varieties, with their Pathology, Diagnosis, and Treatment. By Frederick Treves, F.R.C.S. Philadelphia: Henry C. Lea's Son & Co.

ELEMENTS OF SURGICAL DIAGNOSIS. By A. Pearce Gould, M.B., Lond. F.R.C.S. Philadelphia: Henry C. Lea's Son & Co.

A PRACTICAL TREATISE ON MASSAGE: Its History, Mode of Application and Effects, Indications and Contra-indications. By Douglas Graham, M.D. New York: Wm. Wood & Co.

A THEORETICAL AND PRACTICAL TREATISE ON THE HÆMORRHOIDAL DISEASE. Giving its History, Nature, Causes, Pathology, Diagnosis and Treatment. By Wm. Bodenheimer, A.M., M.D. New York: Wm. Wood & Co.

A MANUAL OF THE PRACTICE OF SURGERY. By Thomas Bryant, F.R.C.S. 4th edition, thoroughly revised. Philadelphia: Henry C. Lea's Son & Co.

MALARIA AND MALARIOUS DISEASES. By Geo. M. Sternberg, M.D., F.R.M.S. New York: Wm. Wood & Co.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Nov. 21st, 1884.

T. J. ALLOWAY, M.D., 1ST VICE-PRESIDENT, IN THE CHAIR.

DR. SUTHERLAND exhibited two pathological specimens.

1. *Myeloid Disease*, involving all the tissues of one thigh, in a girl aged 18. When first seen, the symptoms were those of sciatica; a fortnight later a small lump was felt, which, in another two weeks, had enlarged to double its size. A lance was plunged into it, as it felt like an abscess; only blood came away. About a month after, she was admitted into the hospital; but too late for surgical interference, there being no healthy skin left in the neighborhood.

2. *Heart having warty Aortic valves.*—This was removed from a man aged 30, a hospital patient, in whose brain was also found softening of the parts supplied by the right middle cerebral artery. About ten months previous to entering hospital he had recovered from an attack of hemiplegia. In this case there was a history of repeated attacks of acute rheumatism.

Abnormalities.—Dr. Wm. Gardner described two abnormalities which he had lately come across in his practice. The first was a case of double uterus, os and vagina, the latter being divided equally by a septum. Patient was a young married woman, not pregnant. The second case was one of absence of the urethra in a sterile married woman. Where the urethra should be is a pit about one inch deep, at the end of which is an opening with a fringe-like border leading into the bladder. The opening was large enough to easily admit the finger into the bladder. She has never suffered from incontinence, except during the past few months, and then only when in the upright position.

Dr. Trenholme had lately seen a woman with a double vagina, os and bicornuated uterus.

Idiopathic Neuritis of the Brachial plexus.—Dr. Stewart showed a well-marked case of this disease. The patient is a man aged 35, and, until seven months ago, when his neuritis suddenly set in, enjoyed perfect health. There is complete paralysis of all the extensors of the fingers and hand, also of all the flexors except the ulnar, which is only in a paretic state. There is complete loss of the thumb movements. He cannot flex his forearm, neither can he pronate or supinate it. Shoulder movements normal. There is marked atrophy of the paralyzed muscles. The deltoid and the spinati are also in a state of atrophy, but it is slight compared with the wasting of the paralyzed muscles. The paralyzed muscles do not respond to the faradic current. There is both quantitative and qualitative change to galvanism. The A O Z $<$ K S Z, while the A S Z$=$K S Z. The skin of the paralyzed hand is glossy, and at times presents bluish spots. There is marked anæsthesia in the ulnar region of the fingers and hand. All other parts are perfectly normal in their sensation. Very slow improvement is taking place from galvanism.

Tait's Operation.—Dr. Trenholme reported six cases of removal of the uterine appendages, with their results. The operations were made during the year ending April 1st, 1884. The similarity of these cases renders it unnecessary to give details of each, the symptoms being intense pelvic suffering directly

connected with the continuance of the menstrual function. In all the cases the ovaries were enlarged and diseased; in some the tubes were also affected. The operations were made without the use of the spray, but the hands, instruments and sponges were cleansed in a weak solution of carbolic acid and water. The ligatures used were of shoemaker's white thread, No. 20, carbolized over night. This ligature has always been the doctor's favorite in abdominal surgery, and although he has tried silk, he would not do so again. The plan followed was to use single ply of the thread, and where the tissues to be embraced were more than could be safely included in a single ligature, he resorted to the application of several ligatures, rather than use double or multiple thread. This thread, untwisted, is a safe ligature, never has failed in his hands, and has never given rise to any perceptible irritation, even when as many as forty or more have been left in the abdominal cavity. Dr. Trenholme also discards abdominal bandages, trusting to the deep silver sutures to secure coaptation. Horse-hair is used for the superficial sutures, the wound is dressed with carbolized gauze, and over all two or three strips of strong adhesive plaster are placed to lessen the tension on the sutures. By carefully dividing the sheath of the rectus muscle (on either side), and not wounding the muscle itself, and also by carefully excluding the muscular tissue from the deep sutures (*a la* Goodell), we secure, as well, perfect union by first intention. This was the case with all the reported cases where this plan was carefully followed. In all these cases a slight metrorrhagia occurred on the second or third day, lasting several days; also, all the patients suffered for several months afterward from flushes of heat and hot perspiration. In one case the patient had a slight bloody discharge on two separate occasions, of about ʒi each time. As to the results, cases 1 to 3 have been followed by satisfactory results, the patients being now capable of performing the household duties appertaining to their respective stations in life. In all but one of these cases the cure has been complete, and even in the exceptional one, the return to health continues to advance with progress of time, the chief impediment being due to hernia of the

bowel. Cases 4 and 5 were complicated with mental disturbances. No. 4 has not been appreciably benefited by the operation. Time is still needed to determine what improvement may yet take place. Case 6 is of special interest. Here suicidal mania followed long-continued disease of the uterine appendages. With the supervention of the mania, the pelvic suffering ceased. Both ovaries were diseased, and their removal has been followed by most gratifying results to patient in every way. Her mind has been greatly improved—no more mania—and her physical condition so improved that she is able to take an active part in the duties of a farm life.

In the discussion which followed, Dr. Trenholme advocated the study of mental diseases in connection with disorders of the generative organs, both male and female, and said he believed a great field was opened up worthy of further exploration. He also spoke of the great benefits to society that would result from the castration of tramps and confirmed criminals.

Dr. Hy. Howard said he believed in a physical cause for mania. In case No. 6, operated on by Dr. Trenholme, anæmia of the brain may have been caused by menorrhagia. He said men have become maniacal the first night of their marriage from anæmia of the brain, being produced by peripheral irritation. Good food, air and exercise will cure such cases. Cases of mania produced by anæmia of the brain are more curable than if caused by hyperæmia.

Dr. Gardner congratulated Dr. Trenholme on the result of his cases, and on being one of the pioneers of an operation which has attained such a good position in surgery. He had operated in four cases. One, a very difficult case, with numerous adhesions and troublesome bleeding, proved fatal from peritonitis. In two of the remaining three the result was satisfactory, but the recovery slow. The third still suffers very much, probably from pelvic inflammation, set up by a long cold drive on her way home after the operation. There could be no doubt of the propriety of the operation in cases of palpable disease of the appendages, with local symptoms, with or without neurotic symptoms sufficiently severe, and in which other treatment failed to relieve.

As to cases with purely neurotic symptoms, aggravated at the menstrual periods, there is room for doubt as to the propriety of the operation. Hegar and other eminent German authorities, at the last International Congress, had declared in favor of it, while Spencer Wells and others were opposed to it. The neurotic element, in many of the cases, must be recognized and treated. The successful gynæcologist must also be in some measure a neuropathist. It is probable that certain cases reported cured by this operation might have been spared the mutilation, and cured by a treatment mainly tonic and neuropathic. Every gynæcologist must admit that there are cases of enlarged diseased ovaries in women capable of a good deal of activity—mental and bodily. All his patients had suffered more or less from the disturbances, vascular and other, which attend on natural menopause. In none of them had ventral hernia occurred, but he had taken care that each patient was fitted with an efficient abdominal supporter before being allowed to leave her bed.

Dr. Armstrong said he had operated twice for the removal of the tubes and ovaries. His first case was a success every way, though recovery at first was very slow. His second case has fully recovered from the operation, but sufficient time has not elapsed to say what will be the permanent effect.

Stated Meeting, Dec. 5th, 1884.

T. G. Roddick, M.D., President, in the Chair.

Dr. Shepherd exhibited a large tumor which he had lately removed from the left parotic region. The patient was a woman aged 47. Tumor appeared as a small lump below the ear four years ago; it increased slowly, but was not painful until lately. The tumor, during the last six months, had grown more rapidly and had produced some facial paralysis. There was no interference with the circulation. The tumor was partly beneath the sterno-mastoid, and firmly fixed by the parotid fascia. The removal was tedious and difficult, owing to tumor not being very well defined. The external carotid artery was tied, and the fascial nerve had to be sacrificed. The patient recovered

rapidly, and had no elevation of temperature. On examination, the tumor was found to be a fibro-adenoma. The second day after the operation an ulcer developed in the cornea, which took some time to heal. This was probably caused by an edge of the bandage coming in contact with the open eye.

Tumor of Bladder.—The PRESIDENT exhibited a cystic papillomatous tumor which he had some weeks previous successfully removed from the bladder. A microscopic section of the tumor was shown. The history of the case is as follows:—Geo. T., aged 53, was admitted into the Montreal General Hospital, Oct. 27th, complaining of much pain and difficulty of micturition, and pain over the region of the bladder, with frequent over-distension. Symptoms began ten years ago with occasional difficulty in micturition. Three years ago, noticed blood in the urine for the first and only time. At this time he made water every hour, with pain before the act; pain chiefly referred to the end of the penis and neck of the bladder. Catheterization now became frequently necessary. When admitted into hospital, made water every hour, but from a bladder distended to the extent of a couple of pints would evacuate three or four ounces. There was constant hyper-distension of the bladder, forming a distinct tumor, extending sometimes to near the umbilicus. There was great pain in the left iliac region, especially during the act of micturition. Prostate very slightly enlarged. The bladder was sounded carefully, but nothing definite could be made out. Dr. Roddick thought the case was either one of encysted stone or tumor of the bladder, so decided to explore the bladder carefully after the manner of Sir Henry Thompson. This he did on Nov. 12th. A staff was introduced, and the membranous portion of the urethra cut down upon. The finger was then introduced through the prostatic portion, and almost immediately something was felt. On examining more carefully, Dr. Roddick discovered a pediculated tumor attached to one side of the neck of the bladder. This he freed with his finger-nail and extracted. The tumor was almost as large as a hen's egg. For a few days the man had some elevation of temperature, but now he was convalescent, and was passing his water by the urethra. Dr.

Roddick remarked that he had several times explored the bladder as in this case, but that this was the first time he had ever discovered a tumor.

Dr. Molson presented to the Society two large calculi which had been lately passed by one of his patients, who had had frequent attacks of renal colic and bloody urine.

Lead Poisoning.—Dr. Mignault then read a paper on two cases. The first case was well marked. Patient, a young woman, came under his care at the Hotel Dieu Hospital, suffering from wrist drop, constipation, colic, and distinct blue line of gums. There was also extreme wasting of the extensor muscles, and also of the muscles of the ball of the thumb ; this wasting had been rapid. The source of the lead poisoning had been traced to some pickles which the patient had eaten in large quantities three or four times a day, having been advised to do so for loss of appetite. Lead was found in large quantities in the vinegar used to preserve the pickles. There had been several similar cases in the neighborhood where the woman lived which had all been traced to the eating of pickles. In the second case, the poisoning was also due to the eating of pickles. In this case, besides the wrist-drop, blue line, colic, &c., there was marked melancholia and mental depression.

Dr. F. W. Campbell looked upon mental depression as frequently present in lead poisoning. He advised large doses of iodide of potassium to be given—half to one drachm doses.

Dr. Gurd explained that the common kinds of pickles were kept in glazed earthen jars before being bottled, and that oxide of lead was used for glazing the cheaper earthenware ; this, when brought in contact with vinegar, was dissolved out in the form of the soluble acetate of lead, and so poisoned the pickles.

Drs. Gardner, L. Smith and Molson, each reported a case of lead poisoning. Dr. Molson's case ended fatally, and delirium was a marked symptom from the beginning. The man had been employed mixing paints for some two months, and the attack commenced with colic, later there was constipation and mental depression, then delirium. The wrist-drop only came on during the last three weeks. Patient died of exhaustion.

Dr. Jas. Bell said that there were two kinds of lead poisoning—acute and chronic—and he had, whilst medical superintendent of the Montreal General Hospital, seen many cases of both kinds. He believed, in the chronic form wrist-drop was a remote symptom, and not accompanied by colic, as in Dr. Mignault's cases. The blue line could be caused by other sulphides than lead. He thought the rapid wasting of the muscles not a common symptom in lead poisoning, and suggested that Dr. Mignault's first case was not one of lead poisoning at all, but due to some trophic changes. It looked very much like a case of polio-myelitis of spinal cord.

Dr. Jas. Stewart asked if the deltoid muscle was affected. He said in any case of paralysis the extensors were the first to suffer, and, last of all, the intrinsic muscles of the hands. If these were affected early, he thought Dr. Mignault's first case might not be entirely due to lead poisoning.

Dr. Hy. Howard wanted to know how the iodide of potassium acted, and the effect of the lead on the nervous system. He said: It is a remarkable fact that in all cases of muscular atrophy and paralyses of parts from poisons, so much depends upon the poison as to how the nerve centres are attacked. For example, in the case under consideration, lead poison, the highest centres —that is, intelligence—although the lowest organized, is the last attacked; the first being the afferent or peripheral sensory nerves, rendering the parts anæsthetic. Now, because the trophic nerves are paralyzed, they can no longer perform their function; and, in accordance with the natural law of waste and supply, or of evolution and dissolution, it is all waste and no supply, consequently atrophy of the part that has been deprived of its supply. The next stage is the natural consequence of the first, the peripheral nerve lesion—that is, motor paralysis—and why? Because the roots of the motor nerves leaving the spinal cord, as well as the cord itself, are supplied by these trophic nerves, consequently these parts lose their supply, and the waste causes paralysis of the motor nerves. Thus do we account for the atrophy and paralysis of a certain group of muscles from the toxia of lead poisons, and, I have no doubt, for other functional

symptoms that we find in cases of lead poisoning, remembering that all functional symptoms are due to structural cause. With regard to toxia from alcohol, it is a fact that the first organs affected are the highest nerve centres—viz., intelligence. A man first becomes a fool from the poison, then the sensory nerves becomes paralyzed, and he is anæsthetic—that is, general anæsthesia ; and the last stage of the poisoning in both is hemiplegia.

Dr. Mignault, in replying, said that the symptoms of the acute and chronic forms might exist together, the one passing insensibly into the other. In the first case the deltoid muscle was apparently normal. He was certain that the muscles of the thumb atrophied early and rapidly.

Hydrochlorate of Cocaine.—Dr. Buller, on being asked to give his experience with this new local anæsthetic, said :—On the 7th of November I commenced using the new local anæsthetic (cocaine) in operations upon the eye, and have had an opportunity of testing its merits in quite a variety of cases. Under its influence I have performed iridectomy five times, extracted two senile cataracts, removed four tarsal cysts, discision of capsular cataract twice, opening of the canaliculi twice, and operation for obstruction of the lachrymal duct once. I have always used a four per cent. solution. The results have been gratifying, but not entirely satisfactory. The first iridectomy was for artificial pupil on account of a central leucoma of long standing. Two instillations at an interval of five minutes. Ten minutes after the first instillation, grasping the conjunctiva with fixing forceps caused no discomfort. The operation was performed in the usual way. In reply to my question, "Did you feel any pain?" the patient, an intelligent man, said "No, I cannot say that I did." In iridectomy for lamellar cataract, preliminary iridectomy for senile cataract, and for acute glaucoma, I was equally fortunate. In one case of iridectomy for commencing staphyloma following ulceration of the cornea from purulent ophthalmia, the patient complained considerably of pain during the operation, notwithstanding four applications of the drug at intervals of five minutes. There was in this case an incomplete anæsthesia, ascertained by testing the relative sensi-

bility of the conjunctiva of the other normal eye. Perhaps the still somewhat infiltrated and swollen conjunctiva had been rendered less susceptible to the action of the drug by the recent inflammatory process. In one case of senile cataract, the anæsthesia was all that could be desired; in the other, the patient became restive before completion of the incision, and give me a good deal of trouble before the operation was satisfactorily completed. In both, the result of the operation was perfectly satisfactory; and I may say that I have not observed the slightest ill-effect from the use of cocaine up to the present time. In one case of discision of a partially absorbed traumatic cataract, repeated instillations failed to produce any anæsthetic effect, and the patient complained of pain quite as much as if no anæsthetic had been used. The same solution had proved perfectly efficacious upon another patient a few minutes previously. It would therefore seem that some eyes cannot be rendered anæsthetic by the use of a 4 per cent. solution of cocaine. For the removal of tarsal cysts, the pain was only trifling after three or four instillations of the solution; so also in slitting the canaliculi, and was certainly diminished even in the operation of opening the nasal duct.

Dr. Gardner had removed a urethral carbuncle without producing pain by means of cocaine.

Dr. Alloway had opened a large retro-vaginal abscess painlessly with a 4 per cent. solution of cocaine.

The President reported a painless operation upon himself by means of cocaine. He had, in fact, pulled out one of his own double teeth. He applied a 4 per cent. solution by means of two bits of lint for some 15 minutes before "putting on" the forceps. The tooth was firmly fixed, and he only felt a slight pain towards the end of the operation.

Neuritis of the Brachial Plexus.—The discussion on this case (exhibited at last meeting by Dr. Stewart) now took place.

Dr. Hy. Howard said: Whether the etiology of this case be idiopathic or traumatic, or, more properly speaking, whether it be due to chemical or mechanical lesion, it is a case in proof of my theory that peripheral, or trophic, or sensory paralysis is

followed by muscular atrophy and motor paralysis. This case went to prove the now established physical fact that alterations or change of animal organisms--that is, of structure—creates change of function, and that change of function is necessarily followed by change of conduct. These truisms explain how the sane man of yesterday is the insane man of to-day; how the rascal of yesterday is the saint of to-day; the immoral of yesterday the moral of to-day; the irreligious of yesterday the sanctified of to-day; and how so many people deceive themselves, mistaking structural and functional changes for supernatural cause of effect.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

The Use of Carbolic Acid in Purulent Affections of the Conjunctiva and Cornea.—A few years ago, when resident surgeon of the Moorfield's Eye Hospital, London, I introduced into ocular practice the use of the 5 per cent. lotion of carbolic acid in gonorrhœal ophthalmia. Previous to this, I had tried every variety of treatment then recommended with a success not very encouraging. The deep transparent excavations of the cornea so frequent in this affection so often followed by perforation and prolapse of the iris, or deeply infiltrated ulcers which, through leaking in their floor, give rise to falling forwards and adhesion of the iris to the posterior surface of the cornea not again to be loosened; or other cases in which the ulceration rapidly involved the whole cornea, causing destruction of vision, and at times of the eye itself—all these terminations have I at different times witnessed and seemed powerless to prevent. If the changes did not go so far still I have been kept on the wings of expectation, not knowing, with the arsenal of remedies then at my command, what the outcome might be. These are a few of the considerations which made me anxious to get a better and more reliable remedy. Now, after a considerable lapse of time, I feel that I have secured the desired remedial measure in carbolic acid. I have tested its merits in all the various

forms of gonorrhœal ophthalmia, for instance, in that with much serous chemosis and swelling of the ocular and palpebral conjunctivæ; in that where the œdema is as great, but harder and denser; in that where the conjunctivæ of eyeball and eyelids and the sub-conjunctival tissue, are so fully loaded with exudation as to give the brawny, mottled look of diphtheritic ophthalmia. In fact, quite lately, I had a case, that of a young man, in whom the inflammation was the most violent I had ever witnessed. The partly everted lids had the mottled, white and red look with inability to remove any of the infiltrations so characteristic of diphtheritic ophthalmia. When the tissues began to unload themselves, quite large pieces came away leaving excavated and bleeding surfaces. I value the treatment by carbolic acid so much above all the other varieties that I have ever employed, that I now use no other. Under its influence, the transparent excavations quickly heal, and, moreover, have never, since I began its use, progressed to perforation, as formerly so often the case. The same may be said with respect to the other forms of corneal ulceration brought to our notice in gonorrhœal ophthalmia.

I, however, met with one form of corneal mischief, which I do dread, and against which I am not as well provided as I could wish. This form is the deep, circumscribed infiltration of the cornea with the external surface unabraded. Here the morbid process goes on extending inwards till hypopyon comes. After this the external surface ulcerates, and then the part is so weak that at once perforation of the cornea and entanglement of the iris, more or less complete, takes place. The powerlessness of carbolic acid in this variety is due to its inability to reach the seat of mischief. The consequences in these cases being such as I have mentioned, have determined me to do Saemisch's operation when the opportunity is given me, and by so doing bring the abscess under the benign influence of this acid. This action I shall take, though well aware of the great danger of incising the cornea in the midst of such a fierce purulent discharge.

As is well-known, in the worst forms of gonorrhœal ophthal-

mia the lids are so swollen and stiff, that only very partial or no eversion can be made. This prevents the proper application of other forms of treatment, such as strong solutions of nitrate of silver, the mitigated and pure stick. The carbolic acid lotion travels with great ease beneath the lids, and hunts out as it were all the obscure places. The way in which to make such a thorough application can, after a short time, be taught any moderate skillful nurse. These last truths I consider of great moment, and factors telling much in its favor. The course pursued in the treatment of a case of gonorrhœal ophthalmia is as follows:—The patient is ordered to bed; then there is placed at his bedside a large basin of cold water, in which there is always kept a big piece of ice. The eye is to be bathed by the patient, or by the nurse, very frequently so as well to cleanse the eye. In the intervals, cloths wet in the iced water are constantly to lie upon the closed eyelids. The lotion—of a strength 1 in 20—is to be thoroughly applied *every hour*, the lids being as well everted as possible. These applications are to be made day and night. In consequence of this, a nurse must be in constant attendance. The pain and smarting, which ensue after using the carbolic acid, last but a few seconds, and are succeeded by a feeling of comfort and relief. This is another point in its favor, and in direct contrast to the effects of the powerful caustics heretofore employed. As the discharge becomes thinner and more laudable, the 5 per cent. lotion is to be used every second hour, and during the intervening hour the $2\frac{1}{2}$ per cent., or 1 in 40, is to be applied. As the virulence of the affection goes on diminishing, the 1 in 40 may be used altogether. I do not employ the watch-glass protector, the ingenious contrivance of Dr. Buller, of Montreal, for the sound eye. I tell the patient to lie on the side on which the affected eye is, and warn him of the danger of inoculation. I consider these measures to be sufficient precautions, when using so frequently an application of such strong antiseptic properties. I look upon this lotion as the most effective and reliable remedy we have at our command in gonorrhœal ophthalmia; and the more I make use of it, the greater becomes

my faith in its power for good. The great *antiseptic* and *astringent* properties of carbolic acid place it, in my opinion, without a rival in the treatment of this inflammation.

This is its history in my hands with regard to the foregoing affection. I shall now mention it with respect to other purulent affections, especially where the cornea is markedly implicated. One of the most dreaded sequels to a cataract extraction is purulent infiltration of the corneal wound. When this infiltration of the cornea has made its way to Descemet's membrane, and is also spreading in other directions in the corneal substance, and is associated with free purulent discharge, there is a feeling in the mind of the operator that the eye is as good as lost. It is in just such cases that I have more than once been completely successful, and have secured an unimpaired eye. I well recollect one case, that of an old and feeble man, an inmate of Moorfield's Eye Hospital, in whose eye on the third day after the operation, when union had taken place, infiltration of the wound set in. This, under the usual mode of treatment in such cases, got worse and worse. The infiltration alarmingly increased in depth and width, and the discharge became markedly purulent and copious. It was quite evident that improvement must quickly take place, or the eye would be lost. I now vigorously applied the 5 per cent. carbolic acid lotion. The result was that in two days the eye was out of all danger. Then, on examining the wound, there was to be seen a deep, broad excavation reaching to Descemet's membrane, with a ragged but healthy surface. The surrounding cornea was bright and clear. This excavation gradually filled up, and the patient went out with a good, serviceable eye.

In those cases of kerato-iritis, where the corneal ulceration is extensive, this lotion has been used with most beneficial results. Here it is combined with the usual treatment of atropine, warm bathing and constitutional remedies.

I have based all my remarks upon those cases in which the corneal inflammation was extensive, and associated with more or less purulent discharge; and where a new departure in treatment would show its usefulness, and enable a just conclu-

sion to be drawn—in other words, in test cases. If I think a weaker lotion than the 5 per cent. will answer the purpose, I may not at any time use the 5 per cent. I feel that I am fully justified in strongly recommending the carbolic acid lotion in the various and kindred affections laid before you—for it has so often come out victorious in real test cases, and where previously non-success had too often been my lot. It is very necessary to use the *pure* carbolic acid, as any impurities give rise to such irritation and sometimes pain, as not only seriously to interfere with its full and proper application, but also materially to lessen its curative properties.—*Dr. G. Herbert Burnham, in American Journal of Ophthalmology.*

Conduction of Physical Signs in Diseases of the Lungs.—Dr. Markham Skerritt read a paper on this subject before the Medical Society of London. He said (*Lancet*) that it was universally recognized that the lung tissue acted as a conducting medium for physical signs in heart disease, but it was not so fully appreciated that the physical signs of lesions of the lungs themselves might be detected at a distance from their source. It might be stated (1) that physical signs due to disease of a limited portion of lung were liable to be conducted by the adjacent tissue so as to be recognized at a distance from the site of the lesion, as in front when the disease was at the back, or on the sound lung when one lung only was affected; (2) that it was therefore as important to trace to their origin the physical signs dependent upon lung disease, as it was to follow out those of a cardiac lesion. Instances were adduced of the adoption by a consolidated lung of the signs of pneumothorax derived from the opposite side; the transmission to the sound side of the tubular breathing of pneumonia, the interchange of physical signs between the affected side and the unaffected in pleuritic effusion, the conduction of the physical signs of the phthisis from one apex to the other, and the conveyance throughout the pulmonary region of sounds having a strictly localized origin. The physical signs most liable to conduction were those of auscultation; and of these,

chiefly râles and altered breathing. In the localization of a conducted sign in lung disease the process was the same as in the case of a cardiac lesion. In conduction a physical sign (1) retained its special quality; (2) lost in quantity in proportion to the distance from its source. The readiness with which a physical sign was conducted was also of value as an indication of the state of the transmitting tissue. The subject of the paper was one of considerable importance, as instances had been met with where error had resulted from a want of due appreciation of the facts adduced. In the discussion which this paper elicited, Dr. Theodore Williams remembered several instances in which it had been difficult to arrive at a correct diagnosis, from physical signs being conducted away from the place at which they originated. Dr. Kingston Fowler said it was very common to find that the physical signs of a cavity at one apex of the lungs were conducted to the opposite apex.

Treatment of Cancer of the Rectum.—In a clinical lecture at the Neckar Hospital, Professor Trélat drew the following conclusions with regard to treatment of cancer of the rectum:—(1) Cancers of the rectum should not be touched, unless they cause grave disorders. This rule should be positive, with the single exception that very small cancerous deposits may be removed from the lower part of the rectum and the margin of the anus. (2) In all other cases the treatment should be confined to complications and palliative operations. In giving these rules I am in accord with Professor Verneuil. (3) As palliative operations, rectotomy may be done when the finger can be passed beyond the upper limit of the neoplasm. If the neoplasm is more extensive, the surgeon should abandon rectotomy, and work out a way of derivation; for by performing rectotomy in these cases, the surgeon is almost certain to injure the peritoneum. With the English surgeons, and Labbé and Tillaux, I am in favor of lumbar colotomy, because it is a simple operation, less dangerous, and affords a ready means of exit for the fæces. Other surgeons prefer to make an inguinal anus; but

there is risk of opening the small intestine, with all the attendant dangers and inconveniences.—*Revue de Therap.*, May 15, 1884. *Br. Pract.*

Treatment of Chronic Dysentery by Voluminous Injections of Nitrate of Silver.—At the meeting of the Clinical Society of London, held Nov. 14, 1884, Dr. Stephen Mackenzie stated that extended experience had strengthened his belief in the value of large enemata of nitrate of silver in the treatment of cases of chronic dysentery, or dysenteric diarrhœa. The mode of procedure he adopted was as follows:—The quantity of nitrate of silver to be used was dissolved in three pints of tepid water in a Leiter's irrigating funnel, which was connected by India rubber tubing with an œsophageal tube with lateral openings. The patient was brought to the edge of the bed and made to lie on his left side, with his hips well raised by a hard pillow. The terminal tube, well oiled, was passed about eight or ten inches into the rectum, and the fluid allowed to force its way into the bowel by gravitation. The injection rarely caused much pain, and often none. It usually promptly returned, but when long retained, it was advisable to inject chloride of sodium to prevent absorption of the silver salt. Various strengths had been used, from 30 to 90 grains to three pints of water, but usually one drachm of nitrate of silver was employed. The treatment was based on the view that whatever the nature of dysentery, whether constitutional or local in the first instance, the latter effects were due to inflammation or ulceration of the colon which was most effectually treated, as similar affections elsewhere, by topical measures. Sometimes one, sometimes two injections were required, and in some cases numerous injections were necessary; but in all the cases thus treated, many of which had been unsuccessfully treated in other ways previously, the disease had been cured. In most cases other treatment was suspended, but in some Dover's powder, or perchloride of iron, which had been previously administered, was continued or subsequently prescribed.

The cases narrated were:—1st, In which the disease had

lasted several years on and off; two injections were used, and the case was cured in six weeks. 2nd, Second attack, duration uncertain; four injections used; cured in five weeks. 3rd, Duration, two months; two injections used; cured in three-and-one-half weeks. 4th, Duration, five years; one injection used; cured in three weeks. 5th, Duration, eighteen months; two injections used; cured of dysenteric symptoms, but remaining under treatment for diabetes. 6th, Duration, fourteen months; one injection used; cured in seven weeks.

The treatment, which laid no claim to novelty, was brought forward to elicit the experience of others who had tried it, or to induce others to employ it in suitable cases.—*Medical Press and Circular.*

The Treatment of Acute Gonorrhœal Epididymitis by the Application of Clay to the Scrotum.—Before describing this method of treatment of epididymitis recommended by Dr. Loucachévitch, a few words as to the popular employment in Russia of clay as a medicament may not be out of place, particularly as the custom has also the scientific endorsement of Prof. Botkine. In the district of Riazane, according to the *Travaux de la Société Médicale de St. Petersbourg* (published in the Russian language), the peasants frequently employ a mixture of clay and vinegar as a cooling local application in fevers. In Wologda the women soothe the pains of hysteria by the application of clay to the soles of the feet; and the Russian surgeons Zablotzki and Chipoulitzki, as well as the celebrated Pirogoff, often employed clay with success in the treatment of aneurism. Prof. Botkine also used this same remedy in cases of aneurism of the thoracic aorta, in neuroses of the heart and in the treatment of the disagreeable epigastric pulsations in hysteria. After the application to a pulsatile tumor of a paste of clay, there follows not only an improvement in the subjective condition of the patient (diminution in the asthmatic symptoms and cardiac pain), but also in the objective condition; the tumor diminishes in volume and (as seen in the case of aneurism of the thoracic aorta) the pulsation becomes more feeble. So also

in the reduction of the epigastric pulsation in hysteria the applications of clay at the same time cause a notable reduction in intensity of the other disturbances of the abdominal organs; the vomiting, diarrhœa and abdominal pains disappear. These results Prof. Botkine explains as due to the refrigerant action of the clay, and above all to its metallotherapeutic properties. Recently Dr. Loucachévitch has successfully treated several cases of gonorrhœal epididymitis by the application of clay, employing the white moulding clay of sculptors made into a paste with water. A square piece of muslin is covered with a thick layer of this paste, and, while an assistant raises the tumefied scrotum, the dressing is so applied as to cover all the affected region up to the root of the penis, and is retained in position by a suspensory bandage, the patient remaining in bed during the treatment. As the clay retains its moisture for some time, it is only necessary to renew this dressing twice daily—morning and evening. The author assures us that in ten minutes after the application the pain is reduced in intensity, and soon disappears completely. On the second or third day the swelling rapidly subsides, but the treatment should be persisted in for four or five days. Up to the present time the author has treated 26 cases by this method, without the use of any other therapeutic measures (such as leeches, etc.), and in all he obtained a prompt cure.—*Gazette Médicale de Paris*, Nov. 22, 1884; *Therapeutic Gazette.*

Splenic Murmur in Intermittent Fever. Maissurianz (*St. Petersburg Med. Wochenschrift*) describes a systolic murmur which he has heard over the region of the spleen in patients with acute intermittent. He explains the phenomenon on the ground that it is probably due to dilatation of the splenic vessels following enlargement of the organ; it is also possible, he thinks, that the arteries may be subject to alternate contraction and dilatation, so that the blood meets with an obstruction in its flow through the spleen. The murmur is analogous to that sometimes heard in the uterine sinuses during pregnancy. The writer maintains that this condition

has never before been described. He has noticed the murmur in eight cases, all of which were acute. In spleens which were affected with permanent or chronic enlargement he has never been able to detect it. He considers its presence a diagnostic sign of considerable importance, and implies that such cases are most benefited by a direct application of the interrupted current over the spleen.

Importance of Early Removal of Caseous Lymphatic Glands.—Dr. Geo. R. Fowler of Brooklyn concludes an article on this subject (*N. Y. Med. Jour.*, Jan. 10) with the following summary:—To summarize them I would briefly call attention to these points: 1, That what may appear—and in the opinion of the older teachers was—an innocent cheesy gland, which had become so from an inspissation of its contents, is really the site of an infiltration of material which rapidly becomes propagated and constitutes the so-called caseous lymphadenitis. 2. That this caseous infiltration may be, and in all probability is, either the bearer of, or the soil proper for, the cultivation of the spore or germ upon which the anatomical product known as tubercle depends for its formation. 3. That there is a period of quiescence varying perhaps in different individuals during which no advance in the disease takes place, but during which the patient is threatened with an outbreak of tuberculosis. 4. Whenever such caseation is within reach of surgical art, the same rule that is applicable to carcinoma and sarcoma—namely, early, thorough and complete removal—should be practised; and this rule might be of service in those doubtful cases where a persistent lymphadenitis, without caseation, occurs, and no explanation or reason for its existence can be found, as well as to enlarged and indurated glands found in the neighborhood of the site of caseation.

Management of Miscarriage.—Dr. W. H. Parish teaches that the placenta at the fourth month can remain in the uterus for some weeks without producing serious symptoms, but that it will produce serious trouble before it comes away. He considers it criminal to let the placenta remain until

bad symptoms develop, as has been taught by some authors. As an expert, he would call such action *malpractice*. He related the case of a woman where the placenta was left after a miscarriage. Four weeks subsequently she was seized with severe hæmorrhage; but even then her attending physician failed to remove the decomposing placenta. Four days later, Dr. P. was called in consultation; the woman was moribund; the placenta was removed, but the patient died.

The lecturer considers no practice so fallacious as the use of *drugs* for the purpose of emptying the uterus, more especially of a placenta. The weakest portion of this organ is that to which the placenta is usually attached, the strongest being that which includes the contracting fibres of the cervix. Hence when we give ergot, we close up the cervix and incarcerate the placenta; and we also render the introduction of the finger, for purposes of examination, next to impossible. He would not leave the placenta in the uterus more than an hour after a miscarriage.—*Med. & Surg. Reporter.*

Night Terrors in Children.—The picture which a child suffering with this condition presents is somewhat as follows:—The child, say from three to six years of age, has gone to sleep apparently in his usual health. Two or three hours later he suddenly rises up in the bed, with eyes wide open, and evidently fixed upon some terrifying object; this may be to his imagination a monster, robbers, etc. His cries are pitiful, his words incoherent, and he fails to recognize the friends who are around him. This condition may last for five minutes to half an hour, then comes a period of calm, he falls asleeps again, and the next day he is as well as ever, without even a recollection of the experience of the previous night. The condition was first described by Hesse of Altona in 1845. Bouchat considered it a congestive neurosis of the brain. West, Steiner, Deseroigilles, Simon and others have described it with varying minuteness, but Debacker was the first to make a complete study of its pathogeny. No convulsions have ever been observed as accompaniments to it. West relates the case of a child eleven months

old, who was troubled with gastro-intestinal disease attributable to dentition, who was in the habit of having seven or eight attacks in a single night. The accident usually happens several nights in succession during a period of five or six weeks, and cases are related in which it has continued during a much longer period. The phenomena of somnambulism are sometimes observed in connection with this condition. It usually occurs in nervous, impressionable children, and very often in those whose constitution is weak, or who have been brought up in defiance of the rules of hygiene. The author, following the plans of Lesegne and Debacker, divides the sufferers into two classes according as there exists or does not exist a permanent lesion of the brain. In the latter class, the most frequent cause of the trouble is to be found in disturbances of digestion. This reflex disturbance of the cerebral circulation is believed to be more frequent in children than in adults, and this, notwithstanding the fact that insomnia, somnolence, vertigo, vaso-motor disturbances, hysterical and other morbid phenomena are well known results of digestive disorders in adults. The morbid action is directed upon the vaso-motor nervous system, and the author mentioned as causative elements too much or too exciting food, too much alcoholic liquor and constipation. As to dentition, night terrors are much more frequently observed during the first than during the second dentition. Less frequent causes are intestinal worms, the irritation of certain skin diseases, and the absorption of certain drugs—belladonna, stramonium, and quinine mentioned as examples. In the other class, in which cerebral lesions form an exciting cause, night terrors may be a preliminary indication of tubercular meningitis, cerebral sclerosis, cerebral tubercles, epilepsy, and hysteria. The prognosis is usually favorable excepting in cases in which severe cerebral lesions are present. The treatment should vary in accordance with the determining cause. Certain hygienic precautions of both physical and intellectual character should be observed in all cases. All cerebral excitement must be avoided, whether it is caused by the reading of fascinating books, or by listening to stories of a terrifying character. The subject should not be left alone in his bed-room,

and when an attack comes on he should be soothed and sympathized with. Regular and healthful exercise should be insisted upon, and the diet should be light and unirritating. If dyspepsia coexists, alkaline preparations, pepsin, or the tincture of nux vomica may be given. West is in favor of suitable doses of bromide of potassium and chloral for a calmative effect upon the nervous system. Quinine is also recommended as a useful drug in many cases. If the gums are hot and swollen it will be eminently proper to relieve them by incision.—*Archives of Pediatrics.*

The Treatment of Nerve Exhaustion.—For the treatment of this disease we are indebted wholly to one of our trustees, Dr. S. Weir Mitchell, and to him we owe a large debt of gratitude for teaching us how to cure cases which had hitherto been the opprobium of the profession. In the treatment there are five ends to be secured—nutrition, sleep, rest of body and of mind, freedom from pain, and an equable circulation. The question of nutrition is an important one, because these women are either wholly without appetite or they reject wholesome food. Repair not equaling wear, the starved brain cannot repose, and the starving nerves clamor. By beginning the treatment with iron, with malt, and with a diet of skimmed milk, usually, after a week's time, the patient begins to crave solid food. Fixed rations of wholesome food at fixed hours are now given, together with as much new milk between times as the patient can possibly digest, and it is wonderful how much food a delicate woman can soon dispose of. A goblet of milk is always given at bedtime, so as to distract to the stomach the morbid self-attention of the brain. Also for its soothing and hygienic effects the patient's body is bathed every day by the nurse. By these simple measures fat is rapidly made, sleep is induced, and nerve pains are allayed, in invalids who have been reduced to the last degree of emaciation, and who have hitherto resisted every kind of treatment, even a local one, for supposed or for real uterine troubles. Seclusion is indispensable, first, to free the mind from care, and next, to remove the invalid from the injurious home environment. There, surrounded by an atmosphere of injudicious sympathy, her whims

are pampered into an unhealthy importance and her slightest caprices anticipated. There, her counterfeits of uterine disease, her mimicries of organic hurt, are nursed into realities, and there she rules as an autocrat. From this exalted position she must be dethroned. Again, seclusion puts the patient wholly under the control of her physician; a matter of vital importance, for there are no hard and fast rules of treatment for restoring these women to health. Each case stands by itself; each case is a study; each has an individuality to which the mental treatment must be adapted, and the personal magnetism of the physician can alone supply the missing nerve link between will and action. To maintain the needful authority over his patient requires the greatest tact, the greatest alertness on the part of the physician. Sometimes he must soothe, and praise, and comfort. Sometimes, imitating the example of the Good Interpreter, who first pulled Christian out of the Slough of Despond and then scourged him well for getting in, the physician must rescue his patient from a relapse and then scold her for it. When the character is passive and the will limp the task is easy. Far otherwise is it with strong wills, with the willful, when a bright and intellectual woman, as she too often is for my comfort, chooses from the start to set herself in battle array. The treatment then becomes a trial for mastery; it is brains pitted against brains, and the physician has to put more and more of himself into the encounter, until he begins to doubt very much whether he has any *more* left. Often have I lain awake, wondering what next was to be done, to save myself from the humiliation of a defeat or of a drawn battle. Often, when crossing the threshold of some room in my private hospital, have I, with my mind's eye, seen my patient draw her rapier and stand on guard, ready to parry or to thrust. Discipline in the end usually triumphs; but the wear and tear of such a case is telling on the physician. Knowing these facts from personal experience, and acting upon them, I have generally treated my patients away from home. Sometimes I have compromised the matter by putting the patient and her nurse in a third-story room at home, but, as it were, under lock and key.

The therapeutic effect of massage and of electricity on the circulation are very striking in nerve exhaustion; but, while very analogous in their action, they need a somewhat extended explanation. The four principal movements of massage are :— 1, Stroking, friction, or surface-rubbing ; 2, Kneading or deep-rubbing ; 3, Tapping, or percussion ; 4, Passive and active motion, by movements of flexion, abduction, adduction and rotation, the patient either being passive or resisting. The first two pleasantly stimulate into action the vaso-motor nerves and the terminal filaments of cutaneous nerves. They also exercise the muscles without volition, and therefore without expenditure of nerve force. Electricity does the same thing. Now this is a very important item in the treatment, for all voluntary muscle work is nerve work, and the nerve capital in these cases is too small to be drawn upon. Percussion made by quick strokes with the ulnar margin of the palm, or with a wet towel, or with two rubber balls mounted on whalebone stems, temporarily stuns the nerves ; and these surprises effect molecular changes, by which lax fibre and tissues of loose consistency are strengthened. Again, both massage and electricity raise the body temperature, stimulate the nervous system, promote the secretions, and increase the peristaltic action of the bowels. Also the new and sharp impressions of electricity break up, as Anstie has shown, the mental attitude of morbid concentration on the hysterical or the pseudo-neuralgic pains. Thus these two agents not only act as antidotes to the evils which come out of prolonged rest, but they meet several important indications. Further, the assumption having been made, that in these cases there is disturbed circulation, as well as enfeebled ennervation, it follows that when a pathological process is set up by an increased flux of blood to an organ, whatever tends to lessen the amount of blood flowing to it, tends also to restore it to health. Now, both electricity and massage increase surface circulation in the large vascular district of the skin ; they flush its shallow arterioles. Again, by irritation of vaso-motor nerves, they also produce reflex changes in the circulation of deeper parts. But increased capacity in one vascular district causes lessened capacity in another. Hence the flux of blood is

diverted from the blushing or congested organ, and its circulation is lessened. Causing in this manner anæmia of the brain, sittings of massage or of electricity are often followed by sleep. In all my cases the interrupted current was most commonly used, the galvanic current being reserved for stubborn and deep-seated pains. In a large proportion of these cases there was more or less of anæsthesia in one leg—usually the left—accompanied by burning and cutting pains radiating from the corresponding ovary. Faradic excitability was at first always enfeebled on the affected side, but, after several applications, the muscles began to respond to the current, and the motility was restored. In not a single instance did these nerve lesions last long. The ovaralgia was, however, not so readily overcome, but it was very interesting to watch how surely it was rubbed out and faradized out—in fact, extinguished.

The foregoing treatment was the one to which our patient of to-day was subjected, and to which she so marvellously responded. Of local applications she had but four, and these were made more for the moral effect than for any hygienic purpose. This treatment answers admirably also for the spurious womb-ails and nerve perturbations of the climacteric. Nothing so surely controls the heats and chills, the shiverings and sweatings, the nerve tinglings and emotional explosions, so common at the change of life. Of course, it would be unreasonable to suppose that all local treatment is to be excluded from the Rest cure, as it is technically called. Putting a woman to bed cannot cure a torn cervix, or a cervical stenosis, or an acutely bent womb. But what I claim for it is, that it has, in my hands, cured granular erosion, menorrhagia, inter-menstrual ovaralgia, prolapsed ovaries, coccygodynia, and most of the diseases arising from passive congestion. It certainly is a specific for menorrhœa, or for scant menstruation, and also for dysmenorrhœa, when not dependent upon a sheerly mechanical cause. While in the treatment of the reflex uterine symptoms of nerve exhaustion, nothing can compete with it. The lesson, then, which you will take home with you to-day is, that urgent uterine symptoms are not always evoked by uterine disease, and that there exist many nerve counterfeits of uterine disease.—*Dr. Goodell in College and Clinical Record.*

CANADA

Medical and Surgical Journal.

MONTREAL, FEBRUARY, 1885.

MEDICAL CARE OF THE INSANE.

Our contemporary, *L'Union Medicale du Canada*, treats of this subject in its issue for January. We are glad to have the unqualified support of this influential journal on such an important question. We have, for some years, been drawing the attention of the public and of the Government to the lamentable condition of the insane poor as regards the medical treatment of their mental maladies. Great indignation was expressed by some interested parties at the words we employed in describing the existing state of affairs. The words were strong, but no stronger than were called for by the facts. We said there was *no* medical treatment in the asylum nearest us; and the truth of this, as we meant it to apply to therapeutic means and measures directed against the patients' *mental* maladies, was admitted by the profession at large. *L'Union* says, under the present farming system "le traitement médical égalera zéro," which corresponds exactly with the estimate we had been led to place upon it. That journal then proceeds to ask what can be expected of one man who lives only in the neighborhood of the Asylum, and whose time is divided between a general parochial practice and the medical supervision of a great establishment containing upwards of 1000 lunatics. Our contemporary calls upon the Government to acquire the provincial asylums and assume the entire direction of and responsibility for them, and believes that no thorough reform can be had until this is done. Our Provincial Parliament will soon re-assemble, and the public will look with lively interest to the steps which may be taken by

the Government with reference to the amelioration of the present condition of our insane population. It has only been by the outspoken condemnation of the asylums by one of the most eminent of British alienists that our rulers have at last been roused from their mediœval lethargy upon these vital questions, and we do hope that independent members and the press generally will see that a renewed somnolence shall not be permitted to again come over them. There are, no doubt, serious practical difficulties in the way of reaching these reforms, *i.e.*, in doing away with the abominable farming system which is at the root of all the evil; but the greater the obstacle, the greater the credit for overcoming it. The scheme suggested by our contemporary may not be in all respects just what we should ourselves prefer, but, all the same, the end we both have in view is identical. "What we desire is that our insane patients receive proper and suitable treatment from a medical standpoint, and that, for this end, they be maintained under the care of men in whose scientific skill and experience we can place the most absolute confidence. As it is, we are far indeed from this ideal (the entire profession of the province admits as much with bated breath); and if we have the courage to proclaim it aloud, we also will have that to work with all our might to attain the desired end."

CITY SANITATION.

It is universally admitted that the advent of cholera to this side of the Atlantic with the coming spring and the opening of the navigation is by no means improbable. In the United States great consideration has been given to the question of prevention, and precautionary measures on an extensive scale have been widely adopted by the various cities and municipalities. It is satisfactory to find that in the Canadian provinces also attention is being given to this all-important subject. The city of Montreal, being the port of entry for the majority of the shipping of the Dominion, should above all others be up and doing. The Board of Health have not been idle of late, and considerable progress has been made in the right direction. The health officer, on the 13th inst., addressed a special meet-

ing of the Medico-Chirurgical Society called for the purpose of hearing what had recently been done, and what it was proposed to do, to improve the health of the city. The proposed Health bill for the province of Quebec was alluded to, and the importance to the city of having this carried through was made clear. Mr. Archambault, who was present, explained that the bill, which had already been before the society last year, had received certain amending clauses, and it was fully expected that, at the approaching session, the Government will introduce it as a public measure, and that we will therefore soon have a proper sanitary law to cover the whole province. As Dr. Hingston very properly pointed out, Ontario has been saying very little but has in active operation a very complete sanitary regulation. He thought it high time that, after the amount of talk that had been for years expended upon this bill of ours, something practical should quickly follow. The law once in force, it will perhaps be possible to do something to remedy the utter disregard of all the laws of health openly practised in many of the surrounding municipalities. The regular reporting of contagious diseases was also discussed. Certainly this has been successfully carried out, *e.g.* by the Illinois State Board of Health, but we doubt very much its practicability here. The appointment of district physicians is urged as necessary to assist the health officer in case of the presence of an epidemic. The necessity for some such appointments for a large city seems quite evident. The next point alluded to was the abolition of privy vaults, or at any rate the regular emptying of these and disposal of the contents. The City Council has already attacked the latter part of this problem, and will probably soon make a contract for the incinneration of all the fæcal matters collected from the vaults. Dr. Sterry Hunt spoke strongly in favor of this plan and believed that it could ultimately be made financially successful, owing to the value of the products. This innovation has been forced upon the Council by the action of the surrounding municipalities, who have unanimously refused to allow the deposition of night-soil within their limits. From a purely sanitary standpoint, the scheme has everything to commend it.

The abolition of all cess-pits and privies is a matter of considerably more difficulty, but its importance is no less. To accomplish this it will be necessary to introduce by law some other system, such as the dry-earth closet, and amongst the poor this will he found very hard to do. In the discussion upon this point, several speakers urged the superiority of the water-closet system where the supply of water is as good as in Montreal, and thought that this should be placed within reach of the poor by reduction of the rates. Dr. Godfrey spoke of the introduction of cholera by the river in former epidemics, and urged the importance of quarantine and careful inspection of immigrants. Dr. Campbell spoke of the arrest of the disease in New York harbor in 1866, when imported by the steamship Atlantic. In that case the ship was at once quarantined, and the cholera never appeared in the city itself, though two cases followed in the harbor. The meeting was a very important one, and elicited a good deal of animated discussion. There was too much ground covered by the paper to allow of any one point being thoroughly dealt with ; and in view of the widespread interest felt in all sanitary matters at the present moment, we we would suggest to Dr. Larocque to have another meeting, say in a month's time, with ample notice beforehand, at which a few special points connected with the Asiatic cholera might be presented to the society for fuller discussion.

THE SCHOOL OF MEDICINE.

It is definitely announced that the Montreal School of Medicine and Surgery is about to apply to the Legislature for a charter granting it University powers, and thus enabling it to grant degrees. It is stated, we know not on what authority, that it is not the intention of Laval University to oppose this application. As far as regards the present aspect of medical education in this Province, it can make but little difference whether our Parliament grants the powers asked for or not. As it is now, the School of Medicine educate and examine a certain number of students every year. Those of the final year who pass—and there are very few who do not—proceed

to Victoria College, Coburg, and receive the diploma of M.D. They return and present the diploma to the Provincial Medical Board, and on it receive their license to practice. If the school itself granted the degree, it would simply save the men a journey to Coburg. The giving of University powers is, however, a matter of which the legislatures cannot be too jealous. It is certainly against the interests of higher education that the number of universities in any country should be multiplied; and no scheme for the introduction of what would practically be a new university should be encouraged until the most substantial reasons can be adduced, showing that there is a clear demand and urgent necessity for it. It remains, therefore, to be seen what are the grounds upon which the school founds its claims to be admitted to rank as a university.

Prof. Osler, now of the University of Pennsylvania, sailed for England on the 10th inst. He will deliver the Gulstonian lectures immediately upon his arrival in London, and proposes returning at once to Philadelphia. The subject he has selected is, we understand, the "Pathology of Endocarditis."

Dr. H. N. Vineberg, formerly of this city, is at present in New York taking special courses in Gynæcology. We learn it is his intention to proceed to Europe (Berlin and Vienna) to follow up the same branch. He has expressed his desire to devote himself entirely to the practice of gynæcology in the future. He will probably settle finally in this country, where his admitted ability is likely to secure him a good *clientèle* after the special advantages he will have had.

A New Medical Senator.—It is our pleasing duty to congratulate our *confrère*, Dr. Sullivan of Kingston, upon his elevation to the Senate. The well-known ability of the new senator, his eloquence, ready wit, and skill in debate will be sure to make him a valuable member of the upper house. It is gratifying to know that in Dr. Sullivan the profession have one who has always taken a deep and active interest in all matters which concern its welfare and advancement, and that, from his long

experience, he is most competent to take part in any legislation tending to the promotion of professional interests or to advance measures for securing the public health. The position has been fairly earned, and the selection will be universally applauded.

The John H. Stratford Hospital.—The city of Brantford, Ont., has been the recipient of a most munificent donation from a public-spirited citizen; nothing less, in fact, than a complete, handsome, well-appointed hospital of a capacity sufficient to meet the wants of the city for some time to come. Mr. Stratford, the gentleman in question, aided by Dr. Digby and others interested, made careful investigations into all the particulars concerning hospital construction most suitable for this climate, and the result is the production of a building pronounced by those who have seen it to be perfect for all the purposes required of it, and at the same time elegant and appropriate in all its fittings. It was opened by Lieut.-Governor Robinson on the 10th instant, when suitable addresses were made. Brantford is to be congratulated, and it is to be hoped that such well-directed generosity as that of Mr. Stratford may be widely imitated.

One Hundred Years of Publishing.—The firm of Lea Brothers & Co., of Philadelphia, have issued a neat little volume to commemorate the centennial existence of their publishing house. It gives a most interesting account of the founding of the establishment by Matthew Carey in 1785. This gentleman had left Ireland owing to political troubles, and immediately upon his arrival in the New World began publishing a journal in Philadelphia. The publication of books soon followed upon journalism, and the medical branch of the business took firm root with the establishment, in 1820, of the *Philadelphia Journal of the Medical and Physical Sciences*, which, in 1827, changed its name to *The American Journal of the Medical Sciences*, and which is now, with the single exception of the *Edinburgh Medical Journal*, the oldest existing medical journal in the English language. The *Medical News* was established

by the same house in 1843. The house soon devoted its entire energies to medical publications, and during a great many years supplied a very large proportion of all its literature to the profession. Founded upon true business principles and with able men constantly at its head, the establishment has maintained for itself the very highest reputation, and enters upon the second century of its existence with every prospect of undiminished usefulness and continued success.

—The authorities of the University of Vermont, U.S., have announced that they will grant the M.D. degree to British registered medical practitioners of good standing, who pass a satisfactory examination in medicine, surgery and midwifery. No residence is necessary, and the examination may be passed in three days. The fee for the examination is only £6. The first examination, under these regulations, will take place in June next, and I have no doubt that a goodly number of English practitioners will be induced to take a trip to the States in order to obtain the legal right to assume the title "M.D." Hitherto Brussels has enjoyed almost a monopoly in granting the M.D. to English practitioners, but in future it will find Vermont a formidable competitor for the English guineas.—*Hospital Gazette.*

Personal.

W. G. Henry, M.D. (McGill, '83), passed the examination for L.R.C.P. on the 24th ult.

The Hon. Dr. Robitaille, ex-Lieutenant-Governor of the Province of Quebec, has been nominated a Dominion Senator in place of his brother, who has resigned.

Dr. H. V. Ogden (McGill), has been appointed Professor of Materia Medica in the Milwaukee Medical College, Wisconsin.

Dr. Jas. Dorland (McGill), has been appointed to the chair of Principles of Medicine in the Milwaukee Medical College, Wisconsin.

Medical Items.

—We are glad to announce that *Gaillard's Medical Journal* of New York will be continued by Messrs. M. E. and E. W. Gaillard and an able corps of collaborators.

—Dr. Ambrose L. Ranney, Professor of Applied Anatomy in the Post-Graduate Medical School of New York city, has been appointed to fill the chair of Anatomy in the Medical Department of the University of New York, rendered vacant by the death of Prof. William Darling.

—The New York Dispensary, the oldest dispensary in that city, is about inaugurating an entirely new system of medical administration. Instead of the thirty-two physicians and surgeons who now attend gratuitously, they are to appoint five medical officers, who shall be remunerated for their services. The chief of these will receive $1200 per annum, and the others $800. They will attend four hours daily. The effects of this new departure will be watched with interest.

Dr. Gaillard.—Dr. Edwin Samuel Gaillard, the veteran medical journalist and editor, died at his home in Ocean Beach, N.J., on the 2nd inst. He was born near Charleston, S.C., on the 16th January, 1827. Dr. Gaillard graduated from the University of South Carolina, at Columbia, in December, 1845, and from the South Carolina Medical College, at Charleston, with first honors, in March, 1854.

The Noble Army of Martyrs.—Of 129 doctors who, as agents of the White Cross Society, devoted themselves to the care of cholera patients during the recent epidemic in Naples, twenty fell victims to the disease. Is it not a little singular that, while the attention which the king showed to the sufferers was heralded throughout the world as an example of rare devotion and heroism, no mention was made of the score of noble men who offered up their lives on the altar of philanthropy ?

Prof. Cohnheim's Successor at Leipzic.—Since Professor Cohnheim's death, the election of his successor has been looked forward to with much interest and curiosity. The University

of Leipzic hoped and tried to secure the services of Dr. R. Koch, but Herr von Gossler, Prussian Minister of Education and medical matters, interfered, and avoided a loss which would have been irreparable for Berlin. The medical faculty of Leipzic has now proposed the following three professors to the Saxon Minister of Education—Drs. Recklinghausen, Ziegler, and Birch-Hirschfeld. As it is not supposed that Professor Recklinghausen is likely to leave Strasburg, the choice will rest between Drs. Ziegler and Birch-Hirschfeld.—*Brit. Med. Journal.*

Artificial Impregnation.—This subject has been discussed, and has its advocates. The *Gazette Hebdomadaire de Médecine et de Chirurgie* reviews at length a new novel with the suggestive title of "Le Faiseur d'Hommes." The romance is nothing more nor less than a plea in favor of artificial impregnation; the *dramatis personæ* are a childless count and countess and a highly scientific physician. A certain abbé is also introduced, in order to fill out the religious side of the picture. Not to enter into the details of the subject, which are better suited for a treatise on gynæcology than for a popular novel, it suffices to say that the experiment is successful, the result being a son, who is afterward known at court as the "child of the syringe." He should have been called "a son of a gun."—*Gaillard's Med. Journal.*

Administration of Ether.—The following rules are given by Dr. Burrell in an interesting paper published in the *Boston Medical and Surgical Journal*:—1st, Before etherization, the surgeon should satisfy himself regarding the presence or absence of heart disease. 2nd, The safety of the patient and the comfort of the etherizer largely depend on the use of pure anhydrous sulphuric ether. 3rd, The best medium for the administration is one in which the ether can be given in a condensed form or largely mixed with air. 4th, As a rule, the patient should have a brief, clear description of the sensations he is about to experience. 5th, A room free from bustle and confusion before and after an operative procedure is an essential for quiet etherization. 6th, Ether should be administered on an empty stomach. 7th, The knowledge of the effect of a glass of wine upon a patient is frequently an indication of the exciting or stupefying that ether

may have. 8th, No mechanical impediment should exist to respiration. 9th, The pulse and respiration are the safeguards of etherization. 10th, The less ether used in an operative procedure, the better the recovery of the patient from the immediate effects of the operation. 11th, A little ether in children goes a long way.

The Boy and the Bone-Setter.—Speaking of bone-setters recalls a good story which occurred in the North of Scotland, where one of them had risen to great fame and no small fortune by his skill. A country lad residing a few miles off had got his leg hurt at one of the local factories, and had been treated for some time by the local medical man without any good result. His mother, who had great faith in the neighboring bone-setter, wanted the lad to go to him, which he declined, preferring, as he said, the "reg'lar faculty." Eventually, however, his mother's persuasions prevailed, and he agreed to allow himself to be taken to see Daniel R—, the bone-setter. A bed for the invalid was extemporized on a cart, and, accompanied by his anxious mother, he was, after a rather painful journey, taken to the town where the bone-setter resided. The leg was duly examined, and it was found necessary to haul it very severely, in order, as the bone-setter said, "to get the bone in." The lad was liberal with his screams while this was going on, but eventually the bone was "got in," and he was told to go home and in a few days he would be all right and fit for his work. He was lifted upon the cart again, and, with his mother seated beside him, set off for home. "Didn't Danny do the thing well?" said the joyous old lady. "Yes, he did, mother," said the lad, "but I was na sic a fool as to gie him the sair leg!" The "reg'lar faculty" will, we have no doubt, appreciate the story.—*Whitehall Review.*

Pruritus Ani.—A correspondent of the *Brit. Med. Journal* recommends the passing of a pledget of cotton soaked in the following into the anus, leaving until the next defecation, when it is to be reapplied: Acid carbolic, gr. xx; tr. opii, ʒ iv; acid hydrocyanic dil. ʒij; glycerine, ʒiv; aquam ad ʒvj.

Papine.—Dr. Geo. H. H. Williams of Philadelphia, Pa., says: From a somewhat extended experience in prescribing Papine, I am led to regard it as the safest and best of all opiates.

CANADA

MEDICAL & SURGICAL JOURNAL

MARCH, 1885.

Original Communications.

NOTES ON DISEASES AMONG THE INDIANS FREQUENTING YORK FACTORY, HUDSON'S BAY.

By PERCY W. MATHEWS, M.R.C.S.E., M.R.C.P. (London),
Medical Officer to the Hudson's Bay Company.

(*Read before the Medico-Chirurgical Society of Montreal, Feb.* 1885.)

In treating of diseases in the district under consideration, it is impossible, even were it desirable, within the limits of this paper to touch upon other than those which are most common, and to refer to any modifying or exaggerating influences which endemic circumstances may seem to have over them. Therefore, for the purpose of ensuring what I deemed to be a fair average, I have taken account of the last twenty years (1864-84), and thereby ascertained the death-rate to be 12 per 1,000 of the Indian population, which somewhat exceeds 500; but it is necessary to explain that this refers to registered deaths at York settlement only, as it is for no longer a period than the space of six weeks or possibly two months that this population is gathered in and around York, though it must be recognized that the period in question may be considered the most unhealthy of the whole year—June, July and August. Hence, during some ten months, the population is reduced possibly by some 300 souls; although, when it is practicable, sick Indians are brought in to the local hospital at any time of the year. Still, if all deaths in connection with this population were taken into consideration, the ratio per thousand, as far as I am able to ascertain, would

be some two or three in excess of that already stated. Before dismissing the subject of population, it may possibly be interesting to note that the birth-rate for the last 20 years is 3.2 per cent. in excess of the death rate, or 44 per thousand compared with 12 per thousand.

I will now proceed to classify those diseases which are most fatal. Bronchitis and pneumonia come first, representing 35 per cent. in the death rate. Next, tubercular disease, including scrofula, tabes mesenterica and pulmonary phthisis, 30 per cent. Heart disease, including rheumatism, 10 per cent. Infantile convulsions, 10 per cent.; and various causes, 15 per cent. Before I refer to the first mentioned (bronchitis), it is, I think, desirable to describe briefly the position and surroundings of York, as indicating possible climatic influence. York is situated on the west bank, five miles from the mouth of the Hayes, and some six miles to the east of the Nelson river, and is surrounded on the north-west and south by maskeg or swamp, with small tamarac growth here and there, and is fully exposed to gales from all quarters, but more particularly the east—a raw, biting wind sweeping over Hudson's Bay. In the month of April, when the snow begins to melt and stagnant pools to form, an epidemic of catarrh, influenza, bronchitis, or, certainly, some malarial cachexia will very shortly make itself evident, giving rise to dyspepsia, diarrhœa or dysentery. When we consider the organisms of disease that must evolve from the surrounding swamp by decomposition of both animal and vegetable life, it cannot be difficult to realise at least some poisonous principle at work. And, again, later on, when the sun attains almost tropical power, some epidemic of a very serious nature is certain to develop. I may bear this out by only instancing the month of August of 1883. An epidemic of capillary, vesicular and acute bronchitis attacked upwards of 200 people, including one case of acute phthisis and four of vesicular emphysema; 16 deaths ensued in less than one month—acute phthisis, 1; emphysema, 1; bronchitis, 14. My small hospital could only admit ten patients; therefore, the majority of these poor Indians were treated in their wigwams, pitched here and there on rising ground, the

surrounding vegetation of itself necessitating a damp and heated couch, to say nothing of the scanty protection afforded by the nature of the tent itself against the heavy falls of rain. The only distinctive treatment I adopt is the expressed oil from the liver of the Myri (*Lota maculosa*), a fresh-water ling abundant in the rivers and lakes of the Hudson's Bay territories.

Pneumonia.—In connection with pneumonia, I would also say a few words on epidemic disease at this place. I landed at York in the summer of 1878, and found awaiting me 17 cases of pneumonia in their several different stages. (There had been others which were then convalescent.) This may instance the epidemic form that disease assumes in a small isolated place like York. When the surroundings, mode of living, and nature of food are very much the same, individual susceptibilities seem to be done away with, and disease then takes a generally aggressive character.

To bear out the effect of isolation regarding nervous development, even axe wounds are popularly said to be infectious. When one does occur, it is followed by many—the whole mind being absorbed in the contemplating of the "coming wound," and the nervousness induced thereby often consummates the catastrophe.

Phthisis.—Coming next to pulmonary phthisis, it is a matter of some surprise that phthisis is not more prevalent among the Indians, when one takes into consideration that nothing is wanting to exaggerate their strumous habit or develop it more generally as complicated with scrofula. Within the last six years, I have had three cases only—one acute phthisis and two tubercular phthisis. The first case was that of a woman aged 40, who lingered on in the bright and bracing winter, with perforation and painful dyspnœa, till the coming spring developed an unmanageable diarrhœa and death ensued. The second form, acute phthisis being rare, I will briefly touch upon the outlines of the case referred to. A man aged 50, whose history was phthisical, was admitted to the hospital for scrofulous enlargement of the knee joint. Symptoms of phthisis suddenly set in, profuse sweating and diarrhœa markedly; tubercle formed in the lower lobes of both lungs, and rapidly spreading upwards, death from exhaustion took place in five weeks. The last case is that

of a woman aged 38, who has been suffering from tubercular phthisis for upwards of seven years; at times she has severe attacks of hæmoptysis, taxing my utmost efforts to check; on one occasion common salt was used, almost as a last resource, and succeeded; the sputa contained most of the elements of phthisical sputa. She then became pregnant, and as she advanced in pregnancy she improved in health; the cavities broke down and healed, and now, excepting an occasional attack of hæmoptysis, she is comparatively well and able to get about.

Before concluding my remarks on tubercle, I may mention that several cases of death have taken place from tubercular meningitis and tabes mesenterica.

Scrofula will now be referred to briefly. Whatever position is tenable regarding its somewhat debated cause, assuredly York can boast (save the mark!) of both hereditary influence and every other excitant, only excepting syphilis. Diseased nutrition in infancy; food insufficient in quantity, innutritious in quality, and badly cooked; want of cleanliness, intermarriage, prolonged lactation (extending to 3, 4 and 5 years I have noted, and even longer is reported), nasty living, and, in short, every adjunct to the perpetuating of this terrible bane to humanity. The more marked characteristics in the scrofulous Indian babe are: eyes somewhat projecting, oblique, edges of eyelids everted, lower nearly straight, with considerable arch of the upper lid, and colorless; development of alæ nasi: early cutting of teeth and soon becoming carious; later on, forms of strumous dyspepsia show themselves, more or less modified; purulent discharge from the ear and nose; vesicular eruption of the head; enlargement of the glands of the neck and tonsils, and again of the axillæ; and aphthæ, very common. The raising of the temperature in scrofula, with tubercle, can be thoroughly borne out at York. The Indian child, if weaned early, which is exceptional, is fed on uncooked oatmeal and often grease, and very soon partakes of its parents' food. Scrofula, without tubercle, so far as it refers to glandular swellings, more or less ulcerations and indolent abscesses, is far from uncommon, and several cases of strumous disease of joints have also come under observation during

my practice at York. I have also had several cases of posterior spinal curvature, and one rare case of anterior curvature. Scrofulous ulcers are also met with, and are most troublesome to treat, the main difficulty being to secure cleanliness in dressing. I necessarily place great reliance on constitutional treatment and wholesome, regular food. As to drugs, the salts of iron and potash are very efficacious, and carbolic acid and permanganate of potash very excellent as lotions. I may mention here that I have met with decided success by using the syrup of the iodide of iron with young children.

Heart disease has to be referred to next, but I consider that it could be more correctly mentioned as a complication of rheumatism, inasmuch as I have only met with two cases of organic disease, both mitral; but functional, cardiac derangement is very common, and may probably be attributed to many causes. In particular, dyspepsia and excessive and continuous walking and running. Applications are continually being made to me for "heart medicine," which generally consists of some simple ethereal mixture. As one cannot be in a position to remove the exciting cause, the efficacy of the treatment as regards the allaying of the symptoms is somewhat difficult.

Old age, although a cause of death, and can hardly be classed as a disease, is seldom attained to any great degree among the Indians. Within the last twenty years there are four instances, respectively estimated at 80, 85, 90 and 100; the latter I should question. When we take into consideration the life the Indian leads, the bitter winter and scanty clothing, the continuous exercise and precarious food supply, it cannot be wondered at that longevity is not often attained. But when the history of those around a settlement is examined, the wonder is still greater that even exceptional age should be reached. Adopting the habits of the white man, without his precautions, and drinking to excess of tea, whenever they can, in place of the spirituous liquors which they formerly indulged in whenever they could get them, taking to living in houses, instead of following their old wandering, open-air life, and thus being tied to one place, a lack of food-supply follows, and a condition of semi-starvation is sustained for

years, only varied by a surfeit of venison, white bear's meat, or any food that happens to be temporarily plentiful. Some form of disease sets in, and when spring comes, their surroundings are permeated with emanations of offensive matter, for which, reeking putridity is not too exaggerated a term; and lying in their close, hot houses, their scurvy breath rivals the offensiveness of the immediate outside air. Can it then be wondered at that comparatively early dissolution is the result, and that the bright, beautiful winter, with its cumulative suspended poison, is but a temporary negation of the disease-laden swamp of summer.

Cholera.—During the month of May, 1884, I had one isolated case of malignant cholera, originating in the patient (a child) drinking stagnant water or drainage (for there are no sewers here) around its dwelling, the symptoms setting in suddenly—continuous diarrhœa (rice-water evacuations) and vomiting, cramps, coldness and lividity of body, the marked facies choleritica, and death within 15 hours. For treatment, I tried calomel and jalap, iced milk, warm bath, hot bottle to extremities, sinapisms to abdominal walls, and all sanitary measures that were practicable with such surroundings and with constitutions so vitiated. In the treatment of a disease like this, when its first principles are undecided, and the subject of much controversy among the highest authorities of the past and present, a disease at whose call the whole pharmacopœia has at one time or another been tried, and which has incontestably been acknowledged to have no antidote, chance recoveries being accredited to chance "specifics," can it be wondered at that the practitioner soon becomes involved in a maze of perplexity and bewilderment? I would say, in all humanity, that if our endeavors, while awaiting the result of the philanthropic Pasteur's investigations, were directed to the destruction of the agencies, where practicable, through which the dread disease operates, instead of essaying the extravagant treatment advocated by many authorities, that obnoxious word, *empiricism*, would not suggest itself. The blind man at Laporta employed himself in mixing colors for his brother painters. It was acknowledged that he often made mistakes, yet he was much encouraged and esteemed by his brethren of the Grand Academy.

At the time of writing, I have several cases of malarial dysentery. I maintain somewhat the same treatment as referred to in cholera, and hitherto with success. Meningitis supervening in one case, has been relieved by the bromide of potassium. And, lastly, I would say that with such *materies morbi* around us, we can but arrogate an especial providence to ourselves, which permits one of us to escape. I will now touch upon various diseases endemic to this district.

Dyspepsia is the first that must come under notice, including, as it does in local phraseology, every internal organ from the gullet downwards. Among some of the causes of this disease, which are to a certain extent characteristic of the Indian mode of life, I may note improper and uncooked food, largely diluted while masticating, "taking to the track" immediately after an excessive meal, and abuse of tea. I cannot but think that the concentrated and long infused potions of tea taken at short intervals are a fruitful source of dyspepsia, the tannin probably proving injurious to the stomach and the theine to the nervous system; and last, and certainly not least, but still natural to the Indian, surfeiting himself whenever opportunity occurs. I once heard it remarked by an Orkeyman, "that they not only filled their stomachs, but every part of them," the Orcadian intellect only realizing a vacuity in regard to the animal economy. In reference to dyspepsia, it is as well to allude to diseases of the teeth as often dependent on gastric derangement, acting as they do such an important part in the digestive system. It may possibly be interesting to make a comparison between the "good old times" and the present day in connection with the teeth of the Indian. I have only had an opportunity of examining six skulls of ancient Indians during my residence here. All of them are sound in every respect. One of them, which is before me as I write, and which, judging by the worn condition of the molars, belonged to an old Indian, is perfect; not a trace of caries; teeth regular and well formed. Six cases are, I grant, hardly sufficient to be typical, but they show a very marked contrast to the teeth of the present day. White, indeed, the latter are, which may be partially attributed to their habit of chewing

" pitch " (gum of the *Abies balsamar*), but sound they certainly are not. In this respect, Eastern and Western nations differ in their views of æstheticism and conservatism, for the betel-nut and " pitch " have somewhat marked opposite properties. I may state that I have extracted a very considerable number of teeth here at York, though such assertion is slightly in contradiction to that appearing in a Saskatchewan paper of February, 1884, " that the first Indian tooth in the country had been that day drawn." In all deference, I must maintain that the Indians suffer a great deal from toothache, which I think to be in a great measure due to dyspepsia, as has been borne out by treatment. Excessive smoking cannot be laid to their charge. The dyspeptic symptoms are generally characterized by anorexia, foul or furred tongue, flatulency, heartburn, palpitation, sense of fulness in the epigastrium, and invariably by constipation. The treatment is simple. The compound rhubarb powder, followed by some chalybeate tonic or mineral acid, generally answers well; diatetic treatment being impossible with a people who think drugs can do everything. In connection with this subject, I may mention that both aphthous and ulcerative stomatitis are distinctly epidemic every year. I consider the chlorate of potash a remedy that can be almost deemed a specific.

Rheumatism.—With regard to rheumatism or " sore bones," I cannot but think it is more common now than in olden times, from what I hear. Whether this is owing to the more enervating life and different habits of the Indian, or possibly to inferior clothing and the more extensive use of tea which now prevails, or to the settlement being more exposed than in old times to both malarial and climatic influence, owing to the cutting down of wood for many miles around, it is difficult to say; possibly it is due to all combined. Still, it is not here fatal of itself, but its complications are frequently so, involving cardiac lesions in several cases. Synovial rheumatism, with metastasis, is met with, but not commonly; and as age advances, in some few cases I have noted an arthritic form, producing enlargement at the joints and the usual constitutional febrile symptoms. The treatment is necessarily according to circumstances, both iodide

of potassium and salicin acting well ; but the Indians themselves have great faith in local treatment, probably theorizing that the rapidity of the cure will be in proportion to the strength of the "rubbing stuff."

Epilepsy is a disease to which the Indians are peculiarly subject, and when it is realized that four per cent. of the population are afflicted, the statement is warranted. I must note that 50 per cent. of the deaths that take place at York are of children under five years of age, and those deaths have almost, without exception, been of cases who labored under a scrofulous or epileptoid diathesis. To proceed, there were six cases of idiocy at one time (four in two families), two of epileptoid convulsions and one of epileptoid insanity. The first case of convulsions was a somewhat strange one. An Indian, aged 30, was attacked by the fit *with but little warning*. Perfect prostration ensued for about half an hour ; then violent convulsions followed by his seeming to pass into a condition of acute mania, then seizing hold of the first thing (on more than one occasion an axe), would rush off to the woods and commence felling trees right and left. This individual being a tall, powerful man, was not considered harmless, so he was somewhat expeditiously despatched to Winnipeg.

The next case of convulsions came within my own cognizance. Heavy doses of bromide of potassium (15 to 20 grs. three times within the twenty-four hours) apparently prevented a recurrence.

The next case is a remarkable one of epileptoid insanity, and the instance of recovery must excuse a somewhat lengthy account of it :—An Indian, aged 20, was sent to me as insane. He was confined to a small building, erected for a jail, two keepers having been provided, and everything removed from an inner room of the jail. I examined him, and, possibly from excitement, epileptoid convulsions set in during my first visit. In the afternoon of the same day I again visited him, and having had some experience with lunatics in the Channel Islands Lunatic Asylum, I did not anticipate much trouble, as he was a slightly built man ; but before the door was bolted he had torn down a shelf and leaped at me. I avoided the shelf, as it was a big bit of wood,

and tripped him. I then realized that moral suasion would not work, so there and then, though with difficulty, I straight-waistcoated and manacled him. After that day he never attempted to attack me, but for the first two months fits were of frequent, daily occurrence, sometimes several in the day, during all which time he was utterly insane. As to treatment, the tincture of Cannabis Indicus, with bromide of potassium, seemed to modify and in some measure control the fits; and regular, wholesome food, daily exercise and cleanliness, together with firm, consistent kindness, contributed largely to his physical improvement. Latterly he was taking 15 grs. of bromide of potassium daily, during which period the fits and general excitement decreased; then he began to appear pleased at seeing a visitor, and gradually the raving gave way to something approaching intelligible utterance. This went on until the eighth month, when sometimes he talked sensibly, but again at times wildly. At the beginning of the ninth month he had expressed a wish "to go to the doctor's house," so he was brought, and the first thing he "felt it right to tell me was that his viens were returned to him," and he was anxious to work. Expressing my pleasure, but with some close watching, I allowed him to try, but he soon gave up, saying that "his bones were all broken." However, with continued care and treatment, he became what he is now—a rational, good, hard-working, and, further, what is strange in an Indian, a thoroughly grateful man. I am fully aware that epilepsy with insanity is stated to be incurable. I can only assert that the foregoing is a faithful *resumé* of the case, and that epilepsy with insanity in this case was and is cured. This is a practical argument, as the man has been working for two years without a relapse.

Before dismissing epileptic and epileptoid disease as endemic at York, I would lay greater stress on the term *endemic* than perhaps its casual employment indicates, basing the *rationale* of my assertions not only on hereditary influence, consanguineous marriages, excessive sexual intercourse, and other recognized causes generally, but to some considerable extent upon climatic, and thereby miasmatic, influence. For the sake of exemplification, it is necessary to be somewhat discursive. In the first

instance, lactic acid was and is rightly presumed to be the cause of rheumatism, because its toxological effect on the living animal produces one of the most striking complications of rheumatism—endocarditis; but it is equally allowed that climate and surroundings generate the same poison. Again, with endemic cretinism, the more generally stated cause is endemic brochocele and consanguineous marriages, though miasmatic poisoning is equally allowed. Instances could be greatly multiplied, but hardly so within the scope of unpretending notes. Therefore, taking into consideration that some swamps, marshes and jungles produce cholera, some yellow fever, some ague, in malarious districts, the question seems to me to devolve itself into one only of suitable conditions of moisture and temperature. It is, I think, feasible to admit that epilepsy, allowed as it is to result from the poison of rheumatism, scarlet fever, diphtheria, &c., may result from a poisonous principle that produces these diseases. Then may not the brain equally, directly or indirectly, be influenced by a like poison of a miasmatic nature. In short, if so many diseases can be traced to miasmatic influence, as a direct exciting cause, may it not be recognized as an exciting or exaggerating influence in epilepsy, since epilepsy is itself attributed to such varied causes, themselves induced by malarious poisons.

Fevers.—It may seem somewhat strange, yet it is most fortunate, that of late years, beyond symptomatic fevers, this class of disease is almost unknown at York; one death only from measles being recorded. Many years ago typhus fever "was landed" by a ship and carried off many of the natives; and again, 1862-3, thirty-five deaths took place from scarlet fever, introduced originally from Manitoba.

Skin Diseases.—It may be noted of diseases of the skin, that they have, without exception, a scrofulous diathesis. Enveloped as the Indians are with the dirt of ages, skin diseases seem hardly to have a fair chance of satisfactorily developing; or such immunity may possibly be attributable to the antiseptic qualities of mother-earth. Were an isolated portion of cuticle to be examined at any time, the enterprising histologist must needs relegate its owner to the order of the pachyderms, and

the condition of their feet is certainly suggestive of that terrible form of leprosy—*elephantiasis.* Not long since an old Indian was asked when he last washed. "Ah! that was many years ago, when I was young and foolish," was the still regretful reply. I am not aware of distinctive skin diseases among the Indians, with the exception of, perhaps, one or two, which I will touch upon, together with the more marked of those that are met with.

A few cases of *Erythema* and *Urticaria* are noticed. *Herpes labialis* is very common, it being induced by the action of the sun and wind, and exposure generally. Vaseline gives great relief. I have not met with a case of *shingles.*

Strophulus.—The children are particularly subject to a very aggravated form of this generally considered simple "tooth rash," but at York it assumes a distinctive character of *Lichen Scrofulosum*, and is extremely hard to treat.

The only form of *eczema* I have noticed among the Indians is *Eczema Marginatum*, a seemingly modified form of *Tinea circinata*, closely allied to the Burmese ringworm, occurring about the fork of the legs, near the junction of the thigh and scrotum, and is caused by dirt, heat, friction and moisture. It yields readily to treatment with a solution of bichloride of mercury (2 grs. to the ounce of fluid), or a strong solution of hyposulphite of soda (℥vi ad ℥vi of fluid), washing well with soap and water previously.

Mal de Raquêt.—"Snow-shoe sickness" is necessarily commonly met with at York. In some cases, and where it is necessary "to carry on" or continue the journey, I have applied the moxa.

Snow-blindness.—The upward reflection from the snow of the strong actinic sunlight of spring soon sets up an inflammatory action of the optic nerve. The little intolerance of light and the sense of "sand in the eyes" is most painful. Cooling sedative lotions, or warm decoction of poppy capsules, and perfect protection for the eyes is the general treatment.

Scurvy is frequently met with among those of the Indians who live in houses. In fact, in winter, I may say that almost every disease met with is complicated with the scorbutic taint.

Undoubtedly the sameness of diet, use of salt meats, lack of fresh, exposure to impure air and want of sufficient light exert a strong predisposing influence. In the more serious cases, the salts of potash and iron are most efficacious. As anti-scorbutics for distinctive treatment, the cranberry (*Vaccinium oxycoccos*), infusion of the cones of the coniferæ generally, Labrador tea (*Ledum latifolium*), the mountain tea, and the dried leaves of the beautiful little partridge berry (*Mitchella repens*), are employed. The latter is used as a beverage when other tea fails.

Obstetrics.—As may well be imagined, among a people but little removed from the savage, obstetrical complication is of somewhat rare occurrence. Within the last 20 years, and probably for many years previous, but three deaths have taken place. One a case of twin delivery (by-the-by, extremely rare among the Indians), the other two (the first on record) being puerperal mania and insanity. Putting aside the fact of this disease being highly contagious in an isolated place like York, it is *highly sympathetically infectious.* Impressionable, superstitious, and easily influenced as these Indians are, had circumstances allowed (notwithstanding my precautions as regards direct contagion), I am convinced that there would have been several cases. *En passant*, one nurse, who was past childbearing, was perfectly fascinated, as if by mesmeric influence, and had to be removed and kept away by force, and was completely demented for over a week, during which she had her first epileptic seizure. Regarding the first case, some two or three months before labor set in, symptoms of mental excitement, together with strange forebodings, made themselves evident. The cause of the subsequent fever and insanity was, I consider, primarily, a retention of a portion of the placenta, and, secondarily, the morbid condition she had worked herself into regarding the irregularities of her past life. The usual treatment was adopted with marked success, but, becoming partially convalescent, she contracted a chill, which ended in double pneumonia and death. In the second case, mania developed the third day after delivery with the usual symptoms of agitation, excitement, violent delirium and raving, continuing for five weeks, when she

rallied, became perfectly sensible, and was about to be discharged from the hospital when she died suddenly of syncope. This case, though occurring a year or so after the other, was undoubtedly sympathetically influenced by it, inasmuch as it was the first that has ever been noted at York, and like impressions were typical of both cases.

Passing on to labor cases, I have had but few with anything like difficulty,—only two or three cases of post-partum hæmorrhage, one "hour-glass contraction," and one case of forceps; but year by year the Indians are becoming more dependent on the white man. A labor at the settlement can hardly take place now without the doctor being sent for. This possibly may be owing to the fact that his obstetrical sympathy oft-times has to assume the somewhat practical shape of tea and sugar, or chocalate, the latter "drug" being highly esteemed. Inconsistently apeing some of the habits of the white people, as these poor Indian "ladies" do, uterine mischief is caused by the utter disregard of necessary rest after labor. I have known several instances of fetching water from some distance and bringing it up a steep bank, and cutting wood, the same day (although I must allow they conscientiously take to their bed on their return), the result naturally being severe uterine complications and constitutional irregularities. To this cause, I am sure, may in a great measure be attributed the long intervals between pregnancy and the small families generally met with. The "good old days" have passed away. The degenerate Indian "wife" cannot now retire to the small brushy camp beside the track, and overtake the lordly creature who has not abated one jot of his snow-shoe stride. I have heard of somewhat analagous cases in England among the gipsies, but there is nothing of the "glen and forest green" in the case of the poor Indian woman. Hardy and inured to hardship she well may be; beast of burden. God help her.

Syphilis.—Although I have excepted the syphilitic taint in these notes, as one of the predisposing causes of disease generally among the York Indians, it may be interesting to notice that what is said to be "a bastard form of syphilis" exists, and appears to

be indigenous not far from the district, and among Indians with whom they have casual communication. The disease is locally known as the "Nelson River Complaint," and among the Indians "Muchetas-pinawin"—literally, bad disease. It appears, from description, to be contracted or contractable by the ordinary modes in which syphilis is contracted, but its appearance and results differ widely. Although evidently a primary disease, it is usually seen in a form similar to the so-called tertiary form of syphilis, and exhibits itself in patches of scab raised above the skin, more or less extensive in various parts of the body. The scalp is sometimes covered with it, also the scrotum, prepuce, genitals, lips, elbows, and large joints. In appearance, and when fully developed, it is an elevated greenish-yellow incrusted scab. When this is removed by friction or otherwise, a raw surface is exposed, which, however, granulates and heals, to break out in a contiguous place, unless again exposed to the issue of contagious sores. The lining membrane of the mouth is also attacked, and a warty excrescence of greater or less extent grows there. My informant has seen the whole of the tongue covered with the growth, and at the same time, in the same individual, the scalp matted with the incrusted scab. On the same man, also, old cuts opened and discharged a thin ichorous fluid. My informant heard that when the nose is attacked, the cartilaginous substance is not unfrequently destroyed, as in syphilis. Chancre is said to exist, but no history of bubo is traceable, as it was represented as being always the result of infected coition; although I have since learnt that other means of infection must not be precluded, as the interchange of pipes, and using the same eating utensils, etc. The name known for this complaint in the settlement of olden times was *Sivvens*, which certainly points to a species of Frambæsia, the French nomenclature now taking the place of the old Celtic *sisvin*, and so corrupted to sivvens, and the Scotch sibbens. This, however, is not generally known to be endemic to North America. A medical authority of the settlement told my informant that he believed it to be a form of syphilis. My informant himself saw several cases at Norway House, on Lake Winnipeg, and found it yielded readily

to mercury internally, and externally in the form of black wash. Iodide of potassium was also used. The effects of the disease itself were not so fearful as those of ordinary syphilis, and the mouth excrescence was amenable to nitrate of silver, applied in the solid form. Locally it goes by the name of the Nelson River complaint, and was very prevalent there at one time. Only in generations far back, say over 100 years, could these Indians possibly have had exposure to syphilitic taint, as they were not in contact with either the Red River settlement or York, and the true disease was stated not to exist in those days in either of the two places. Syphilis, however, is said to have been a long time in the McKenzie River district, whither it was conveyed by the various Arctic expeditions, but the Indians of that region had no contact with those of the Nelson River, and, as far as I could learn, the symptoms of the McKenzie River disorder were those of true syphilis. Cases are now and again being heard of from Norway House, which, I fear, cannot be associated with pre-historic times, but have, from all accounts, the usual first-born energy of unadultered syphilis, and this disease is conscientiously developed in its several forms. At all events, I have given it the benefit of any existing doubt, and treated it accordingly.

It may not be uninteresting to trace briefly the etiology of Sivvens, together with one or two somewhat analagous diseases, associating them (as I think they ought to be associated) with unrecognized forms of syphilis, although I am fully aware that I am now touching upon very debateable ground. In the first place, towards the end of the 17th century, Sivvens or Sibbens was very prevalent in the north of Scotland, and was supposed to have been introduced by Charles the Second's troops in their campaigns. Bearing upon this, I may add that for the last 200 years the European employés of the Hudson's Bay Company are year by year engaged from the north of Scotland. Again, in the 18th century, it became very prevalent in the north of Scotland, and, it may be noticed, it became equally prevalent among the Nelson River Indians about the same time. This may be only a coincidence, but it is a suggestive one. Again,

Mal Anglais, Mal de la Baie de St. Paul, invaded the upper part of Canada about the same time, and several tribes of Indians, hitherto strangers to the disease, were rapidly and widely affected by it. That syphilis, like small-pox or measles, spreads rapidly when introduced into a new district, is allowed by many authorities, and it equally assumes an endemic character when localized in secluded districts, and, spreading among individuals of similar habits, acquires an especial character varying from ordinary syphilis. Possibly it may become confounded with other diseases, like the "Radezge" of Norway, which, if I remember rightly, consists of syphilis and leprosy; equally as the "Nelson River complaint" may consist of syphilis and scrofula. In short, were the matter thoroughly entered into, I do not think it would be very difficult to prove, notwithstanding many authorities to the contrary, that the Yaws of Jamaica, the Sibbens of Scotland, the Mal Anglais of St. Paul's Bay, the Nelson River Complaint, and many others, are simply various endemic and modified forms of syphilis.

Thinking that some meteorological data may be interesting, and also perhaps instructive, as bearing on climatic influence in epidemic disease, I am enabled, through the courtesy of Mr. William Wood, our very zealous meteorologist of York, to give the following:—

	Monthly Mean Temperature.	Monthly Mean Barometer.
1883—January	–25.34 F.	29.975
February	–19.78	30.073
March	–13.90	31.55
April	*1.92	31.78
May	*36.53	29.969
June	*53.19	29.968
July	*57.43	29.954
August	*55.46	29.978
September	*43.42	29.920
October	*31.72	30.067
November	–0.25	30.010
December	–22.27	29.999

Monthly Mean of Seasons.	Barometrical.
Winter —Oct., Nov., Dec., Jan., Feb., March, April	30.322
Spring —May	29.969
Summer—June, July, August	29.966
Autumn—September	29.920

RAINFALL.

	inches.		inches.		inches.
May	0.30	July	6.03	September	3.63
June	3.02	August	6.35	October	0.62

RANGE OF TEMPERATURE.

July 5th, 1883 ..... 99° F.
January 3rd and 4th, 1884 ..... 52° = 151° F.

MILEAGE OF WIND.

January	9,720 miles.	
February	9,940 "	
March	9,530 "	
April	8,000 "	
May	8,380 "	Prevailing Wind:
June	7,910 "	North-West.
July	7,510 "	
August	8,730 "	
September	8,060 "	
October	8,340 "	
November	9,740 "	
December	9,650 "	
Total runs	104,510 miles.	Monthly average: 8,709 miles.

ON SUBSTITUTES FOR DIGITALIS.

(*Continued.*)

BY JAMES STEWART, M.D.,

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II.—CONVALLARIA MAJALIS.

During the few years that have elapsed since the lily of the valley has been recommended as a substitute for digitalis, extensive trials have been made with it, especially in the French and German clinics. There is far from being anything like a general consensus of opinion as to its capabilities, when used for the above purpose. Some consider it to be equal, if not superior, to digitalis, while others say that it is entirely untrustworthy.

In the present article an attempt will be made to present the pharmacology and therapeutics of this agent, according to the more recent researches into its actions and uses

It was first introduced to the notice of the profession about three years ago by Botkin, the celebrated Russian physician.

It is, however, a very old remedy, being mentioned even by Dioscorides, who considered it very beneficial in palpitations; "*it fortifyes the heart*," he says.

Botkin was led to employ it owing to its popularity as an "anti-dropsical" remedy among the Russian peasantry.

He alleges that he has always found it a reliable cardiac tonic, even in some cases surpassing digitalis. German Sée considers that in many cases it is the equal, and in a few cases the superior, of digitalis. Leyden, Lubinski, Fränkel, Stiller and others maintain, on the other hand, that in all cases it is inferior to digitalis; and in many cases, they say, it entirely fails to strengthen a weak heart.

At least, a part of this marked discrepancy of opinion is clearly due to the fact, that the various experimenters referred to employed preparations of different strengths, and made from different parts of the plant. Some used an extract (watery or alcoholic) from the flowers, while others used an infusion of the whole plant.

The strength of convallaria preparations depends much on their place of growth and the time the plant is collected. Russian plants are said to be superior, while American are inferior to all others. The flowers contain in greatest abundance the glucoside convallamarin, to which the plant owes all its medicinal properties,—at least its cardiac properties—for, in addition, there is another glucoside, which has been called convallaria, which possesses marked intestinal irritant properties, but is destitute of any cardiac tonic powers.

Pharmacology.—When applied to the heart of a frog, the different preparations of convallaria have a distinct tonic action. They slow and render the heart's movements more powerful. A similar action is observed in warm-blooded animals, although not so marked. Sphygmographic tracings taken from the pulse of man, after a few doses of convallaria, show that not only is the number of pulsations diminished, but the amplitude of the contractions is increased.

If administered in over-doses to either cold or warm-blooded animals, it brings the heart to a systolic arrest.

Through what agencies it slows and strengthens the heart's movements and increases the blood pressure, has not been definitely determined.

It is claimed by German Sée and other French observers that it has marked diuretic powers. That in addition to its power increasing the quantity of urine through its action on the blood pressure, it has a direct influence in stimulating the secreting structures of the kidneys. The diuretic action of convallaria resembles that of caffeine. It has no influence, it is said, in causing any considerable increase in the quantity of urine in a normal condition of the circulation. It is eliminated for the most part by the kidneys, and on heating the urine of a patient who has been taking it for a few days, a slight cloudiness is observable, due to the resin of the plant and not to albumen.

Therapeutics.—The only use of convallaria is as a heart tonic, in cases of failure due to organic disease. It is said to be especially operative in cases of dropsy due to mitral lesions. Its power in strengthening a failing heart is much less than that of digitalis. The latter drug, except in advanced cases of fibro-fatty degeneration, if properly administered, seldom or never fails of at least partially restoring a ruptured compensation.

Convallaria, at times, acts as well as digitalis, and frequently with more promptitude, but in a considerable number of cases it is much less efficient—while it not unfrequently fails entirely in bringing about the wished for results.

If the three prominent cardiac tonics were to be arranged in the order of their power, we would have digitalis first, caffeine next, and convallaria occupying the third place. Arranged according to the promptitude of their action, caffeine would be the first on the list, convallaria second and digitalis third. Arranged according to the order of their freedom from untoward effects, caffeine would certainly hold the first place, convallaria the second and digitalis the third. A preparation made from all parts of the convallaria plant is as likely to cause gastric disturbance as digitalis, while it is much more likely to cause intestinal irritation than the latter. Preparations of the leaves and of the glucoside convallamarin are, however, seldom, if ever, fol-

lowed by any intestinal irritation. The reason that preparations of the whole plant are more apt to cause diarrhœa and vomiting, is that the root contains nearly all the convallaria,—the glucoside—whose actions are entirely those of a gastro-intestinal irritant.

The two following cases may be taken as representing the most favorable action of convallaria in organic disease of the heart. The first is reported by Falkenheim* from the clinic of Prof. Naunyn, of Königsberg. The patient was a woman, aged forty-three. When admitted into hospital she was found to have stenosis with insufficiency of the mitral orifice. There were extensive secondary changes in the heart, together with advanced atrophic nutmeg liver. There was great effusion into the abdomen, as well as into the subcutaneous cellular tissue. The pulse was 90, and the quantity of urine in the twenty-four hours did not exceed 500 c.c. (15 oz.) Two days after the administration of an infusion of the flowers, the pulse gradually began to fall and the urine to increase in quantity. So marked was the increase of urine that the patient was passing 3000 c.cm. ten days after the commencement of the treatment. The pulse fell from 90 to 50. The patient was discharged shortly afterwards, much improved. She was, however, after a few weeks, readmitted in a very similar state to what she was when she first came under observation. The quantity of urine was no more than 500 c.cm. in the twenty-four hours, and her pulse was 90. An infusion of the convallaria leaves was again ordered, with the result that the urine in a day or two commenced to increase in quantity. This increase was gradually augmenting during the ten days that the drug was given, when it reached 2500 c.cm. in the twenty-four hours. At the time that the quantity of urine passed in the twenty-four hours had reached its highest point, the patient had also diarrhœa. The pulse fell from 90 to 60. Coupled with the increased quantity of urine and the fall in the pulse rate, there was a marked relief in all the distressing subjective symptoms which troubled her.

**Deutsches Archiv fur Klin. Med.* Band 36, s. 84.

It should be mentioned that just before the patient was admitted the first time into the hospital, she had been tapped.

The second case* is one reported by Dr. F. T. Roberts, of University College. It was one of mitral obstructive disease, with irregular and inefficient cardiac action ; deficient secretion of urine ; moderate dropsy of the legs and considerable ascites. The obvious results of the administration of the convallaria were :

1. A distinct improvement in the action of the heart, which became more regular and efficient, while the thrill and murmur became more evident.

2. A considerable and progressive increase in the quantity of urine produced.

3. Rapid diminution and ultimate disappearance of the œdema of the legs and the ascites.

In speaking of this case, Dr. Roberts says " that the compound jalap powder helped, no doubt, to get rid of the last symptoms; but the other effects noted were, unquestionably, due to the convallaria, and the increase in the quantity of urine must have been an important factor in removing the dropsical accumulation. I have thought it worth while to report this case in support of the value of convallaria in the treatment of cardiac affections, although I do not for a moment believe that it will entirely supersede other drugs. The patient is now practically well, so far as symptoms is concerned, but the signs of mitral obstructive disease are very distinct."

Dose and Mode of Administration.—Judging from a few trials, the glucoside convallamarin possesses all the active cardiac properties of the plant, with none of its disadvantages. Preparations made from the plant itself are much more likely to bring about vomiting and diarrhœa. For these reasons, the convallamarin should be preferred. Next to it, as an efficient preparation is a fluid extract of the flowers. An infusion of the whole plant is not only unreliable, but is very apt to disagree.

The dose of convallamarin is from one to two grains. It can be made into pill with glycerine of tragacanth.

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* *Practitioner*, April, 1884.

QUARTERLY RETROSPECT OF SURGERY.

By FRANCIS J. SHEPHERD, M.D., C.M., M.R.C.S. Eng.,
Surgeon to the Montreal General Hospital ; Professor of Anatomy and Lecturer on Operative Surgery, McGill University.

Surgery of the Kidney.—At a meeting of the Medical Society of London, held on February 9th, Mr. Henry Morris read a paper opening a discussion on Renal Surgery. In this paper Mr. Morris limited himself to a discussion of the surgical aspect of renal calculus. He did not discuss the relative merits of lumbar or abdominal nephrectomy. The first part of the paper was taken up with the difficulties of the diagnosis of renal calculus. Many cases were mentioned where the kidney had been cut down upon, and no stone found. In many of these cases exploration was no doubt imperfect, and it is now held that an exploration is not complete until the kidney has been incised, and through this incision the pelvis and calyces thoroughly explored with the finger. In this connection, Mr. Morris pointed out the importance of searching the ureter for impacted calculus, and mentioned a case (reported in *American Journal of Medical Science*, October, 1884,) in which he himself had removed impacted stone from the ureter near its entrance into the bladder. The operation of simple exploration of the kidney without incision of its substance is in reality a harmless operation. The incision into its substance adds to the risk of the operation, but makes the diagnosis sure ; and in cases of early scrofulous disease, which are so frequently mistaken for renal calculus, a free exit would be given to the pus, and the free drainage would be of great service. Mr. Morris, in his address, added but little to what is already known regarding the diagnosis of renal calculus. Its diagnosis will always be difficult and uncertain, and many kidneys, apparently healthy, will yet be cut down upon. The operation, even when performed in these cases, often relieves the pain and other symptoms, the nerves involved being probably cut across in the incision made to reach the kidney.

Mr. Morris advised removal of the kidney only when other means of relief failed, as nephrectomy was always a very serious

operation and should not be lightly undertaken. He did not consider nephrectomy justifiable in floating kidney. He held that with regard to wounded kidneys many circumstances had to be taken into account, but if the indications of injured kidney or pelvis of kidney are marked and the gravity of the case urgent, an incision should be made over the kidney at once and drainage or nephrectomy performed according to circumstances. Median nephrotomy or lateral prostatotomy should be performed if clots of blood accumulate in the bladder or are forced into the urethra, giving rise to obstruction, pain, and distress. In cancer of the kidney, Mr. Morris held that nephrectomy was seldom justifiable.

When large abscesses had formed where peri-nephritic suppuration had occurred, nephrotomy, followed by antiseptic irrigation and drainage, was advised. Nephrectomy should not be performed in cases of tubercular disease if the system at large was affected. Mr. Morris thought that if the disease was limited to one kidney and there was danger of exhaustion from suppuration, excision of the kidney might be advantageously performed after nephrotomy had failed. The difficult point, however, is to tell which kidney is affected, and when only one kidney exists. Tuschmann's instrument for closing one ureter was alluded to, but Mr. Morris thought such methods were likely to be of little value. He also stated that in 8,068 autopsies there were but two instances of congenital absence and one of congenital atrophy. (In a male patient who died recently in the Montreal General Hospital of injury to the spine, only one kidney, the right, was found. This is the first case, as far as I know, ever met with in Canada.)

In hydronephrotic tumours of the kidney, puncture or nephrotomy was advised before proceeding to extirpation. (*Lancet* and *British Medical Journal*, Feb. 14th, 1885.)

In the discussion which followed, nothing new was elicited. Mr. Durham stated that he believed he was the first to cut down on a kidney with a view to removing a stone. None was found on examination, though the symptoms were most characteristic. Mr. Knowsley Thornton had found hæmaturia absent in one

case of stone in the kidney under his care. He thought frequency of micturition was more often associated with scrofulous kidney than with calculus of the kidney. He advocated in excision of the kidney the bringing out of the ureter. He had now performed nephrectomy eleven times, with success in all, but in the six in which he brought out the ureter the recovery was most rapid.

In a letter published in the Philadelphia *Medical News*, Mr. Knowsley Thornton gives a synopsis of these cases of nephrectomy all performed by abdominal section. The cases were :— Calculous disease of kidney, three ; scrofulous disease of kidney, three ; hydronephosis, two ; sarcoma of kidney capsule, one ; removal of kidney for wound of ureter during ovariotomy, two. He mentions also that he has had four nephrotomies,—one for cyst of kidney and three for scrofulous disease—with one death and one subsequent nephrectomy ; also three successful nephrotomies. Professor Chiene of Edinburgh (in *British Medical Journal*, February 7th, 1885), reports a case of successful nephro-lithotomy in a man aged 29. The operation was performed under the spray ; the stone was detected by passing in a needle, the kidney substance was then scratched through with the finger nail and the stone removed, by means of a vulsellum, with considerable difficulty. There was considerable oozing after the operation, and convalescence took place in five weeks. The stone weighed 48 grains.

In the remarks which follow, Mr. Chiene says the symptoms which encourage a surgeon to explore the kidney where no swelling exists are (1) long-standing pain in one loin, often intermittent in character, the pain shooting down into the inguinal region and testicle ; (2) blood in the urine ; (3) absence of any calculus in the bladder to account for the symptoms. If the stone be in the pelvis there will probably be pus in the urine, and the symptoms will be more severe and constant than if the stone be fixed in the substance of the kidney. Mr. Chiene also gives a *résumé* of the cases performed in Great Britain, and alludes to the celebrated case of Hobson, which has already been alluded to in this Retrospect.*

* December, 1881.

Dr. E. Sonnenburg reports (*Berlin Klin. Wochensch.*, Nov. 24) the case of a woman, aged 52, who had suffered from pain in the right loin since last Easter, accompanied by fever, wasting and polyuria. She came under the care of Dr. S. in August, when the presence of a large fluctuating tumour in the right half of the abdomen was ascertained, and on aspiration pus was drawn from it. Nephrectomy by abdominal incision was performed on August 25th. The operation was difficult and tedious, the thin wall of the cyst rupturing in the removal. The whole pedicle was secured to the wound, but it was found impossible to secure the peritoneum. The organ was converted into a chambered pus-containing sac, with numerous thin-walled outlying cysts, and a large branching calculus was lodged in the dilated pelvis. Hardly any renal tissue remained. Great collapse followed, terminating in death on the second day, and during the whole interval no urine at all was secreted. There was no peritonitis, the left kidney weighed 190 grammes (8 oz.), was ænemic but histologically almost normal. The fatal issue, Dr. Sunnenberg thinks, could not be attributed to shock of the operation and collapse alone, but that the condition of aneuria, the cause of which remains unexplained, was in the main answerable for this result (*Lancet*, Nov. 29, 1884).

In a paper read before a recent meeting of German naturalists and medical practitioners at Magdeburg, Von Bergmann read a paper on "Extirpation of Kidney." He said the operation is no longer a rare one, for, since Simon's first case, it has been performed 121 times. It may be indicated in a case of malignant tumour or in one of pyelo-nephritis. In the former class the operation is a very dangerous one, as it is necessary to perform laparotomy and to make a double incision of the peritoneum. In 24 cases of this kind, death occurred in 17 soon after the operation—in five of which it was due to hæmorrhage; only four patients recovered. Extirpation of the kidney has much better results in cases of pyelo-nephritis, as of 40 cases 20 have been cured. Von Bergmann does not approve of simple incisions in these cases. During the last 12 months he has extirpated the kidney four times, in each case success-

fully (*Centralblatt für Chir.*, No. 45, 1884; quoted in London *Medical Record*, Feb. 16, 1885).

For readers interested in the surgery of the kidney, I give the following references:—

Lumbar Nephrectomy.—Paper read by Mr. Henry Morris before Royal Medical and Surgical Society of London, with discussion (*Lancet*, Nov. 29, 1884).

Nephrectomy in Italy.—*Lancet*, Dec. 13, 1884: Davy on a case of "Excision of the Kidney," *British Medical Journal*, Oct., 1884, p. 757; Reeves on "Treatment of Ruptured Kidney," *Lancet*, Oct., 1884, p. 588; "Lectures on Cases illustrating Renal Surgery," by Arthur E. Barker, *Lancet*, Jan. 17 and 24, 1885.

Tracheotomy.—At a meeting of the New York Academy of Medicine, held Dec. 4, 1884, Dr. Joseph E. Winters read a paper entitled, "Is the Operation of Tracheotomy dangerous in Diphtheritic Croup? When should the Operation be Performed?" The author said, at a recent discussion in the Obstetric section of the Academy, it was held that tracheotomy was the most dangerous of all the operations in surgery, and he could not permit this view to pass unchallenged. The danger from hæmorrhage, he thought, had been greatly exaggerated. After quoting a number of authorities to prove that tracheotomy was not a dangerous operation, he next proceeded to the enquiry of the manner in which diphtheritic croup caused death. He said in a large proportion of cases the cause of death was the prevention of the entrance of air to the lungs, and that in these cases tracheotomy afforded a fair chance of recovery. When the operation failed to save life it was either because it had been resorted to too late or from want of sufficient care in the after-treatment. In cases of croup the larynx was given rest, and the operation did not injuriously affect the course of the disease. He advocated an early resort to the operation before there was venous congestion of the lungs. The indications for the operation are labored respiration, recession of chest walls and alteration of voice, and when ipecachuana is no longer successful in producing vomiting. Early

age does not contra-indicate the operation, as the operation has been successful at six and nine weeks. In the prognosis after the operation the following points have weight:—Early age; previous ill health, especially affections of a scrofulous nature; the presence of scarlatina or measles in the neighborhood, enlarged lymphatic glands and nasal diphtheria. If after the operation the respiration was not free and deglutition was difficult, it was a bad sign. The conclusions of the paper were as follows:—That tracheotomy, of itself, if performed with care, involved little danger to life; the operation should be performed early, but it was never too late to operate; and, finally, that no patient who died after the operation would have lived if it had not been performed. In the discussion which followed the reading of the paper, Dr. Jacobi said one of the dangers of tracheotomy was from bungling operating; the operation was not necessarily a bloody one if carefully and deliberately performed; if hæmorrhage should accidentally occur, it was better to arrest it before opening the trachea, as the entrance of blood into the trachea was more injurious than is generally supposed, and might result in broncho-pneumonia. He thought it a mistake to cut through the isthmus. Since the introduction of anæsthetics, the operation had become much less dangerous. He preferred chloroform to ether. Dr. Jacobi did not agree with Dr. Winters as to the time of the performance of the operation. Whether the case was one of diphtheritic croup or not, whenever there was laryngeal stenosis, accompanied by a considerable amount of recession, with well-marked and increasing dyspnœa, especially in the morning, with cyanosis and a frequent irregular pulse, the indication was to perform tracheotomy whether the obstruction was due to presence of membrane or not. Pneumonia was a contra indication. In cases where the symptoms above-mentioned existed to a limited extent, or were absent, it was better to wait; and there was all the more encouragement to do this on account of the recent advances which have been made in the medicinal treatment of croup. The bichloride of mercury, especially, had proved of great service. In ordinary cases of croup, he thought it was

safe to delay operating until the bichloride had been given a fair trial. The percentage of recovery without tracheotomy had in his practice been of late much greater than ever before. The causes of death in fatal cases after operation were: First—Diphtheritic sepsis; second—complications of diphtheria as paralysis, nephritis with uræmic poisoning, adenitis, fibrinous pneumonia; third—broncho-pneumonia, or œdema of the lungs; and fourth, the descending diphtheritic process.

Dr. Lewis Smith said the older the child the less danger from tracheotomy. In two conditions the danger was especially great. The first was when the patient was nearly moribund; here the operator, being hurried, does not take sufficient precautions for the control of hæmorrhage; the danger was also greater when the operation was performed without anæsthetics. He agreed with Dr. Jacobi in operating, whether membrane was diagnosed or not, if there were symptoms of increasing stenosis. In cases where the larynx became affected late (fifth or eighth day) the membrane did not form so rapidly, and there was not the same urgent necessity for operating, and it was proper to defer operating until a fair opportunity had been offered for the action of remedial measures. In the first rank he placed alkaline inhalations, to which he believed *tripsin*, which formed an important constituent of the *extractum pancreatis*, could be added with advantage. Calomel was useful in the first stage, and good results had been derived from the use of bichloride of mercury. Tubage, which was first introduced by Trousseau, had been revived with a fair amount of success as a substitute for tracheotomy. He knew of at least one case that had been saved by it.

Dr. Johnson H. Ripley believed tracheotomy for croup in young children was one of the most dangerous operations in surgery. He had performed it over 100 times, and had met with almost every complication. He thought he had saved lives by assisting inexperienced operators, but he had seen a number of patients die on the table. In four of the fatal cases the operation was performed by men of marked surgical ability. In one of these the internal jugular vein was punctured; and

in one case he had seen a knife plunged into the spinal cord. He said that men who operated early had the greatest success, because these early operations were usually unnecessary. The most common cause of death after the operation was bronchial croup, next nephritis with uræmic poisoning, and respiratory or cardiac paralysis.—(Condensed from *Medical News*, Dec. 20, 1884.)

This discussion is most instructive, and shows the great diversity of opinion which exists as to the safety of the operation. I certainly hold, with Dr. Winters, that there is no danger in the operation itself if performed carefully; also that, when performed by men accustomed to operating, there need be no more fear of hæmorrhage here than in other operations. Such an one can cut down on the trachea, even in children with thick necks (if he has one good assistant), and avoid wounding any important vessel. As the vessels are exposed the assistant should draw them aside, and if one be accidentally wounded the bleeding point can be quickly seized with Pean's forceps and the hæmorrhage immediately arrested. I have performed the operation a number of times on all kinds of necks, and have rarely lost more than a teaspoonful or two of blood. If a large vein, as is sometimes the case, crosses the line of the incision, it ought to be cut between two ligatures placed on it. I have never yet seen a middle thyroid in the living, but have frequently seen it in the dissecting-room; but if met with it could be recognized before incising the trachea—that is, if the operation up to that point is as bloodless as it ought to be and can be. The same may be said of an abnormal innominate or carotid artery crossing the trachea. The reason hæmorrhage is so frequent and occasionally fatal is that the operation is generally performed by men altogether unaccustomed to other operations, who are not used to handle the scalpel lightly and carefully, and who, when hæmorrhage does occur, are unable to combat it, not having acquired that deliberateness with quickness of hand and eye which soon comes to one accustomed to frequent operations in general surgery. Most laryngologists, for instance, look upon tracheotomy as a formidable

operation, and, after the skin incision is made, fear to use their scalpel, but instead use a forceps to separate the deep structures, and so displace the parts and make the operation a difficult and tedious one. The cause of death in most of the fatal cases I have met with has been due to the extension of the membrane down to the bronchi; some have died of bronchopneumonia and diphtheritic sepsis, but I have never yet seen a death on the table. I have seen on several occasions, however, apparent death just before the trachea has been opened, probably from heart failure. In these cases, opening the trachea and performing artificial respiration has always brought the patient to. I always open the trachea below the isthmus, and if the isthmus be low down hook it up with a retractor. The trachea below the isthmus is more easily brought into view, the structures about it not being so closely adherent as above, the assistant, as the operation descends, can more easily retract the parts. If no skilled assistant can be obtained, a pair of Pean's forceps clipped on each side of the wound answers admirably. In my experience, death occurs not from the operation but from the disease.

Mr. Ashby G. Osborn, in the *Brit. Med. Journal* of Jan. 17, 1885, reports that in a recent case of tracheotomy, after inserting the tube, he was astonished to find that relief failed to ensue, and the patient, notwithstanding that artificial respiration was practised, died on the table. A necropsy showed that the tube had been passed down between the trachea and false membrane, thus pressing together the sides of the lining tube of false membrane. This source of danger, from the absence of its mention in text-books, Mr. Osborn thinks, has not often been met with. If Mr. Osborn had made it a practice, before introducing the tube, to hold the cut edges of the tracheal incision apart with hooks for a few minutes, and search for false membrane at the site of and below the wound with forceps, this accident would not have happened. It seems to me that most operators insert the tube too quickly; there is no reason for hurry, and mucus and false membrane can always be removed from the trachea better before the tube is inserted than after.

Diagnosis of Perineo-Tibial Sprain.—M. Labbé, of the Beaujon Hospital, says there are four traumatic lesions which

are usually found about the ankle. (1) Tibio-tarsal sprain and (2) medio-tarsal sprain, which are easily distinguished from each other, but (3) perineo-tibial sprain or distension of the ligament which unites the tibia and fibula is not so easily distinguished from (4) fracture, with tearing of the external malleolus. In order not to fall into an error which would be decidedly disadvantageous to the patient, it should be noticed that in perineo-tibial sprain the ecchymosis is seen a little in front of the anterior border of the fibula, while in separation of the external malleolus, it is behind the bone, in the depression which separates it from the tendo Achillis. With regard to the pain, in the case of fracture it is seated immediately over the bone itself; but in the case of sprain, the greatest pain is found in front of the anterior border of the bone. It is in these cases that the elastic bandage has such excellent effect.

Marc Sée has recently recommended the treatment of sprain by the elastic bandage. It is the only method, he says, which fulfils the two indications (1) to cause as rapid absorption as possible of the blood extravasated around the joint and (2) to favor cicatrization of the torn ligaments and ruptured parts by complete immobilization. The antiphlogistics and blood-letting formerly advised by Hunter and Guersant only partially fulfil the former indication. There is the same objection to the movements which Ribe and Bonnet advise for the injured joint. The refrigerants and cold water baths cause contractions of the tissues around the joint and dispel the inflammation, but they are not favorable to the absorption of the infiltrated fluids. Even massage, though superior to the other remedies first mentioned, fulfils only the second indication. The elastic bandage is much superior to massage; its action is continuous, and it favors immobilization of the joint. The bandage should be applied to the skin itself, care being taken to fill up the flat and depressed places with cotton wadding so as to give a uniform surface for the bandage to act upon.—(*Revue de Thérap*, July 15, 1884, quoted in *Practitioner*, Jan. '85.)

For several years past I have treated all sprains of the ankle joint, if seen early, by plaster-Paris bandage applied over the stocking from the cleft of toes to about three inches above the

malleoli. By this means immobility and pressure are obtained. In most cases the patient thus treated is able to get about in less than a week.

Boroglyceride in Ringworm of the Scalp.—Dr. Shoemaker (*Journal of Cutaneous and Venereal Diseases*, Vol. II, No. 7) in ringworm of the scalp, has the affected parts first washed with a weak alcoholic solution of thymol, naphthol, or corrosive chloride of mercury, every day or two. To the surface thus cleansed he immediately applies a 50 per cent. solution of boroglyceride until the entire scalp is saturated with it. He believes the borax to be one of the most efficacious antiseptic and antiparasitic agents, having at the same time a mild, astringent action, and thus tending to allay irritation and soothe the parts. The glycerine at the same time penetrates and carries the substance into the follicles to the parasites. Glycerine has a great affinity for water, and withdraws this from the tissues, thus depriving the fungus of one of its main elements of development. He cannot speak too highly of this application, from which alone he has observed rapid cures in some early cases of ringworm of the scalp. Boroglyceride is devoid of poisonous qualities, and the most irritable scalp will bear it. It should be applied night and morning with a sponge or mop, and must be rubbed well into the follicles with the tips of the fingers.

Treatment of Gunshot Wounds of the Intestines.—At a meeting of the New York Surgical Society, held January 27th, 1885, Dr. Wm. T. Bull read a paper on "A Case of Gunshot Wound of the Intestines," treated successfully by laparotomy with suture of the intestines. (*Medical News*, February 14th, 1885.) He commenced his paper by stating that the majority of surgeons are still opposed to an exploration of the abdomen in gunshot wounds, notwithstanding the very favorable results following operations for the various abdominal diseases. Most surgeons advocating laparotomy for gunshot wounds have been compelled to frame their conclusions on theoretical grounds alone, not being able to support their views by a single successful case. Dr. Bull finds that up to the last twelvemonth there are but two recorded cases in which thorough abdominal explo-

ration was resorted to by laparotomy. Kinloch, in 1882, opened the belly and sutured five pistol shot wounds in mesentery and intestine ; two other wounds escaped observation, and the patient died in thirty hours. Mr. Lloyd, of Queen's Hospital, Birmingham, performed abdominal section for suppurative peritonitis three days after a pistol ball had perforated the small intestine in two places. Death followed in two hours. Last summer, Kocher, of Berne, performed laparotomy for pistol shot wound of the stomach ; he sutured the wound, and the patient recovered.

The case reported by Dr. Wm. T. Bull is the second successful case on record, and is briefly as follows :—Wm. E., a truck driver, aged 22, was brought to the Chambers Street Hospital, New York, Nov. 2, 1884, at 10 p.m., suffering from a pistol shot wound of the abdomen, which he had received half an hour before. On admission he was in good condition—temperature, 97·8° ; pulse 96, and of good volume ; abdomen tender, but not tympanitic or swollen. He was troubled with frequent retching. The wound was not probed, but merely dressed with dry antiseptic dressing. Twelve hours after, when seen by Dr. Bull, he had a pulse of 102 with a temperature of 100·2°, and respiration 30. He had also severe abdominal pains, and vomited some watery fluid ; no blood in urine, and had passed nothing per rectum ; abdomen tender all over, but not swollen ; rectum normal. Had taken nothing but a little milk, which he shortly afterwards threw up. Seventeen hours after the accident his condition was unchanged, so Dr. Bull, recognizing the importance of early interference and the invariably fatal results following wounds of the intestines, and judging by the increase of pulse temperature and respiration, with pain, vomiting and tenderness, that peritonitis had possibly already commenced, decided to open the abdomen and search for the wounded intestine. The room was heated to 80° F. for two hours before the operation ; a spray of 5 p. c. solution of carbolic acid was kept going in the room ; all the usual antiseptic precautions were taken in connection with hands, instruments, sponges, etc. A vertical incision was first made into the bullet wound, which

showed that it actually perforated the peritoneum; then the usual incision was made in the median line from the umbilicus to just above the pubis. On opening the peritoneum a large amount of bloody serum (two pints) flowed out; this contained blood clots, but no fæcal matter. On the border of the first part of the gut presenting was a slight incised wound of the serous coat only, probably made by the scissors. Three or four feet of intestines were then pulled out of the wound and carefully examined. The intestines and mesentery were tinged in places with flakes of fibrin. The gut pulled out was placed between layers of antiseptic towels, and occasionally drenched with warm water. The gut was slightly congested, but the coils were not adherent. The first wound encountered was about half an inch in diameter, situated midway between the attached and free border of the intestine, several feet from the cœcum. The serous coat was cut through and the mucous membrane lacerated and everted. It bled easily when its edges were separated, but not till then did yellow fæces, the consistency of gruel, escape. In all the wounds this was the condition; the everted mucous membrane acted as a plug, which prevented the escape of fæces. The abdominal wound was plugged with large sponges, and the wounded part of intestine laid on a towel and emptied of fæcal matter through the wound, and held with both hands by an assistant. The mucous membrane was inverted by making traction with two hooks so as to make the wound hole a longitudinal slit. The peritoneal edges were then brought together by fine sutures, applied according to Lembert's* method; iodoform was rubbed along the line of suture. After removing several more loops, the cavity of the pelvis was empty, and the cæcum, sigmoid flexure, rectum and bladder were, after sponging out a considerable amount of bloody fluid with clots, examined. The bullet was soon found lodged in the upper surface of the sigmoid flexure, close to its mesenteric border. It was immediately beneath the

* See Retrospect, June, 1884; also in same number other operations in the Intestines, especially paper by Parkes on "Gunshot Wounds of the Intestines."

peritoneum, but on removing it the bowel was found to be perforated. Three sutures closed the wound. The open pelvis was then protected with sponges, and more intestine was drawn out. A third perforation was seen, similar to the first in size, but situated near the free border of the gut; then a fourth and fifth close together, and separated only by a bridge of serous membrane; a fifth and sixth wound was found a little further on; these four last-mentioned wounds being all within a length of four inches of intestine. The two wounds together were converted into one, twelve sutures being required to close it; all the wounds treated as the first had been. A seventh wound was found in the intestine still remaining in the cavity; this was closed by five sutures. All the small intestines were now out except the duodenum. The pelvis was then sponged out with a 21 per cent. solution of carbolic acid, the intestines replaced and the line of sutures inspected as returned. The wound in the abdomen was closed by heavy silk sutures passing through the entire thickness of its walls; the incision enlarging the bullet wound was closed in the same way, a drainage tube being left at its lower end. Iodoform and borated cotton were used as dressing. The operation lasted two hours. Ether was not well borne, and at one time the breathing ceased and artificial respiration had to be resorted to. The patient did well after the operation, and in 24 days was able to eat a hearty Thanksgiving dinner. When shown to the Surgical Society three months after, was in excellent health.

Dr. Bull is to be congratulated on the able way he treated the case and the successful result. No doubt had the man been left without operation, he would have died as so many have done before, under the expectant treatment. The good result of this case will encourage others to follow in Dr. Bull's footsteps and actively interfere in gunshot wounds of the intestines, with the result, it is hoped, of saving many lives.

In the *Lancet* of February 7th, 1885, Mr. Albert Wright relates a case of perforating bullet wound of the abdomen which resulted fatally. It was the case of an inspector of police who was shot in the abdomen by a burglar, and who after being shot

ran half a mile after the burglars, and then walked back two miles to the police station. He was seen by Mr. Wright two hours after the injury. At that time there was not much shock. The bullet had entered two inches below, and to the left of, the umbilicus. The wound was closed and morphia injected hypodermically. During the night all doubt as to the intestine being wounded was removed by the patient vomiting a large quantity of dark blood. The patient still being in good condition, nothing was done ; later, fluid and flatus exuded from the wound, and the abdomen became tympanitic. A counter-opening was made below the wound and a drainage tube inserted. Patient kept getting worse ; vomited at times ; great tympanitic and abdominal pains, and finally died on the fifth day. At the autopsy a large wound was found in the descending colon, 18 inches from the rectum ; the wound was plugged by a fragment of clothing, and there was a good deal of extravasation in the areolar tissue between the sacrum and the colon. The bullet was found imbedded in the centre of the sacrum.

Capillary Puncture of the Urinary Bladder.—Rosenberger advocates this mode of treatment wherever it seems desirable to submit the urethra to a rest-treatment in stricture, hæmorrhage, prostatic affections, etc., etc. In the case of strictures, even those which are permeable improve much more rapidly when they are subjected to this mode of treatment. In one case a capilary tube was passed daily from the anus, and the bladder washed out through it without any reactionary fever being set up. Contrasted with the old operation, in which a large and powerful trocar was employed, its results are greatly superior, and the death-rate, especially among older people, much diminished.—*Centralblatt für Chir.*, p. 376, Nov., 1884; quoted in *Practitioner*, Dec., 1884.

This mode of treatment may be superior to the old one of using the trocar, but offers no special advantages over treatment by aspirator.

Resection of Large Intestine.—Mr. Sidney Jones, of St. Thomas' Hospital, lately resected the cæcum and part of the colon for scirrhous growth in a female patient, aged 54. The

diseased part was completely excised and the ends of the intestines sewn together—ileum to colon. Patient lived three days. Cause of death, peritonitis. Operation performed under the spray.—*Lancet*, Jan. 10, 1885.

Mr. Walter Whitehead (*British Medical Journal*, Jan. 24, 1885,) reports a case of excision of the cæcum for epithelioma in a man aged 38. The lower two inches of ileum, all the cæcum and the greater portion of the ascending colon were removed. The cut ends of gut were brought out of the incision in right lumbar region, the tumour itself having been removed by means of a median incision. The patient did well for a time, but died on the fifteenth day of peritonitis. The operation was performed with strict antiseptic precautions, but without the spray. Mr. Whitehead thinks if the man had possessed a better constitution and had been more temperate in his habits, recovery might have ensued.

Portable Antiseptics.—Mr. T. E. Hayward advises as a portable antiseptic, corrosive sublimate. He says if 10 grains of corrosive sublimate, in the form of powder, be carried in the pocket wrapped round with gutta percha tissue to avoid deliquescence, a solution can be readily obtained, as the powder will freely dissolve in water. By adding one of the powders to a pint of water a solution of 1 in 960 is obtained. He prefers this method to that advocated by Sir Joseph Lister, viz., the solution of the bichloride in glycerine.

Repair of Tendons after Destruction.—At a recent meeting of the Berlin Medical Society, Dr. Gluck reported on a patient whom he had shown to the Society in February, in whom the tendons of the extensor communis digitorum and the extensor indicis had been destroyed in consequence of a phlegmonous affection of the back of the hand. Dr. Gluck replaced the tendons by a plait of catgut fibres, extending from the metacarpophalangeral articulation to the transverse dorsal carpal ligament. The operation had succeeded perfectly, the functions of the missing tendons being now completely performed—ten months after. He also shewed another patient, aged 76, on whom he

had performed the same operation, rather less extensively, but with equally good results. He believes that the catgut, instead of being absorbed, becomes organized. He has tried a similar experiment with divided nerves by stitching one extremity to each end of a decalcified bone, with the result that they have become united. This method has been recommended also by Dr. Vendoit, of Liège, and called by him "Nevrotization du tube osseux."—*Brit. Med. Jour.*, Jan 10, 1885.

Iodoform Eruption.—Dr. A. Neisser (*Deutsche Med. Woch.*, July, 1884) has observed seven or eight instances in which the external employment of iodoform has occasioned an erythematous affection, characterized by the formation of small vesicles and closely resembling acute eczema. In a few hours after the application a deep redness of the surfaces comes on, accompanied by violent burning and itching, then vesicles filled with clear fluid appeared, and soon formed crusts. This resulted, in some cases, from a single application. He defines the disease as an acute dermatitis, and likens it to mercurial eczema. Many patients are peculiarly susceptible, and the slightest trace of iodoform in any application will cause this eruption to appear. (*Journal of Cut. & Ven. Dis.*, Feb. 1885.) I have seen this eruption several times following the application of iodoform to wounds, and at first it looks very like as if the wound was taking on an erysipelatous action. I well remember the consternation the appearance of this eruption caused me in the first case of amputation (of the leg) I dressed with iodoform. I felt sure, especially as the temperature was somewhat elevated, that erysipelas had set in. This was within 48 hours of the application at the time of the operation. The patient, however, kept getting better instead of worse, and soon the case was recognized as one of iodoform rash.

Correspondence.

THE GULSTONIAN LECTURES.

London, March 1, 1885.

To the Editor of the Canada Medical & Surgical Journal.

If Canadians have reason to feel hurt at the slight recently shown them by the Colonial Minister in refusing their generous and patriotic offer, an event took place a few days ago in London, inside the hall of the College of Physicians, that ought to stir pride in the bosom of every Canadian. I refer to the delivery of the Gulstonian lectures of this year by Dr. Osler before that honourable and intellectual body, the College of Physicians. All your readers doubtless know that for the past 200 years these lectures have been delivered by one of the Fellows yearly, and that during this half of the century each year brought forward a Fellow whose name has become a household word in the profession. It has been the sole aim of the College to assign the task, or rather honour I should say, to a Fellow who they felt confident would, by the course of lectures, enrich medical knowledge and shed lustre upon the body. This is the first time that one outside of England has had the honor consigned him, and rarely has it been consigned to anyone outside of the metropolis. The first of the series was delivered the 26th February in the presence of a large audience, consisting for the most part of men ripe in years and knowledge. One need only mention such names as Sir William Jenner and Hughlings Jackson to bear out that statement. Sir William Jenner occupied the chair ; in front of him lay the mace on the table, and in front of the table stood the lecturer clad in a flowing scarlet robe—the academic dress of the College. The lecturer betrayed as little nervousness before that august body as if he were delivering a simple lecture on physiology before a class of green students. A little more fire in the eyes, with perhaps a greater degree of enthusiasm, were noticeable as audience and manuscript were lost sight of in the all-absorbing interest of the subject. The quondam pupil, as he sat in one of the benches viewing his former teacher and present friend,

clothed in flowing robes, and with eloquent language elucidating the deep subject of the pathology of endocarditis before an audience whose very names call forth reverence in every part of the civilized world, could scarcely keep his seat with emotion. I am certain he felt a great deal more pride than the honoured lecturer himself. He could not refrain from reflecting that that was honour indeed, and if Canada had not been given an opportunity of shining in the Camp of Mars she was shining and acquiring fame in the Temple of Minerva. As I have only been here a few days, I have not anything more to communicate which would likely to be of any interest to your readers.

H. N. V.

Reviews and Notices of Books.

The National Dispensatory, containing the Natural History, Chemistry, Pharmacy, Actions and Uses of Medicines: including those recognized in the Pharmacopœias of the United States, Great Britain and Germany, with numerous references to the French Codex. —By ALFRED STILLE, M.D., LL.D., and JOHN MAISCH, Ph.D. Third edition, with 311 illustrations. Philadelphia: Henry C. Lea's Son & Co.

The labor expended in the preparation of this great work is simply enormous. It is not a mere rough compilation of undigested facts, but an elaborate and critical review of, it may be said, all the knowledge that is at present known on all subjects relating to pharmacy, pharmacology and therapeutics. In many respects it is superior to its only rival, the U. S. Dispensatory. Especially in the fullness and accuracy of the therapeutical effects of drugs is this the case. As much, however, cannot be said of that portion devoted to modern scientific pharmacology. In this department we miss that thorough treatment of the subject which so eminently characterizes the other portions of the work. We would respectfully suggest to the learned authors that they should deal with this important subject, in a future edition, which we have no doubt will soon be called for, more in the modern spirit of investigation than is the case in the present

volume. The different drugs in the pharmacopœias of the United States, Great Britain, Germany and France are not only dealt with, but also a vast number of medicinal agents which have not, as yet, found any "officinal" recognition. We know of no work where the same amount of information is obtainable on the extra-pharmacopœial drugs. Of special importance to the medical practitioner is a very complete therapeutical index, which, if it has any fault, is in being over-laden with useless recommendations. The fact of this huge work of 1750 pages having reached a third edition in four years is sufficient proof that both medical men and pharmacists recognize it as an almost indispensable work of reference.

Diseases of the Heart and the Thoracic Aorta.—By Byron Bramwell, M.D., L.R.C.P.E., Lecturer on the Principles and Practices of Medicine, and on Practical Medicine and Diagnosis, in the Extra-Academical School of Medicine, Edinburgh; Pathologist to the Edinburgh Royal Infirmary, &c., &c. With 317 illustrations. New York: D. Appleton & Co.

This is a most exhaustive treatise on this special subject, well-arranged, including descriptions of all the recognized derangements of the heart, its walls, valves and surroundings. It is highly original, containing in every part the results of the industrious author's own observations in the wide field to which he has access in the great Royal Infirmary of Edinburgh; and in the explanations of the various complex mechanical problems, it shows the presence of a philosophical and scientific mind. It is largely founded upon the lectures delivered to the students of the Extra-Academical School, a form which often renders such treatises most acceptable and readable. There is much material here which tends to make it the most complete and valuable of recent works upon affections of the heart. Nor the least important portion is that devoted to the discussion of thoracic aneurism, of which the author has evidently had a large experience, and many of the cases of which are related in illustration of important points. Full praise should be awarded to

the publishers for the admirable appearance of the book. It is almost luxurious. The type is unusually fine, and the pages teem with excellent woodcuts. A striking feature is the introduction of a considerable number of full-page photo-lithographs, admirably done, of hearts or other diseased structures. We strongly recommend this new work from a now well-known medical writer to the attention of our readers.

A New Method of Treating Chronic Glaucoma.—By George Lindsay Johnson, M.A., M.B.B.C., Cantab., Clinical Assistant Royal Westminster Ophthalmic Hospital, &c. London: H. K. Lewis, 136 Gower Street, W.C. 1884.

When taking the degree of M.B. at Cambridge in 1882, Mr. Johnson read a thesis on the subject of "Glaucoma," and, at the suggestion of Dr. Paget, now puts it into shape for publication. The main object which the author has in view is to establish the proposition "that the ordinary method of treatment of glaucoma by iridectomy, though highly successful in acute forms of the disease, is nevertheless both uncertain and unsatisfactory in the chronic condition of glaucoma." The first part of the book is devoted to the physiology of the organ of vision, and the second part to its pathology, with special reference to chronic glaucoma. The operation which the author recommends for the latter affection, and which was originally suggested by Mr. Cowell and Mr. Rouse, is as follows:—After arranging the patient and fixing the eyeball in the usual way, the operator gently thrusts a double-edged modified Wanzel's knife through the selerotic into the vitreous humour towards the centre of the globe. The point of the knife is entered about 4 mm. behind the selero-corneal junction, and should penetrate to the distance of 1 cm. (nearly half an inch), the flat side of the instrument lying not quite parallel but somewhat oblique to the long axis of the eye. The knife is then very slowly withdrawn and, if the tension is high, slightly turned on its axis, so as to allow the lymph freely to escape. No anæsthetic is needed. The author has performed this operation six times and has seen it per-

formed about ten more, and in no case have any bad results followed. We can recommend this little work to all, but more especially to those taking an interest in ophthalmic surgery.

An Introduction to Pathology and Morbid Anatomy.—By T. Henry Green, M.D., Lond., F.R.C.P.L., Physician to Charing Cross Hospital, &c. Fifth American from the sixth revised and enlarged English edition. With 150 engravings. Philadelphia: Henry C. Lea's Son & Co.

This practical and elementary treatise on pathology and morbid anotomy is well known in this country, and is extensively used by students. Its merits, therefore, require no extended notice. It is sufficient to mention that this new edition has been issued, and is, by reason of several important additions, in every way superior to former ones.

The Science and Art of Surgery.—By J. Eric Erichsen, F.R.S , LL.D., F.R.C.S. Eighth edition; revised and edited by Marcus Beck, M.S. and M.B., Lond., F.R.C.S. Vol. II. Philadelphia: Lea Brothers & Co.

We have already expressed our opinion of this work in reviewing the first volume in December last. Volume II is quite equal to the first, and is fully up to date in regard to all modern improvements and recent advances in surgery. It contains the remainder of the Third Division on *Surgical Diseases*, as those of the skin, nervous system, lymphatic system, blood-vessels, bone, joints and muscles, with a chapter on deformities. It also contains the Fourth Division, consisting of *Diseases of Regions*, as head and neck (including diseases of the nose and ears), jaws, plastic surgery of face and mouth; diseases of throat, operations on air tube, diseases of breast and abdomen, with a chapter on hernia and intestinal obstruction, diseases of large intestines and anus, and a chapter on the surgical operations on the kidney. The last nine chapters are on diseases of the genito-urinary organs, Chapter LXXV being devoted to the diseases of the female genital organs, including a description of the operation of ovariotomy. There is also a short appendix on

corrosive sublimate as an antiseptic. From this list it will be seen that Vol. II contains an immense amount of information in a comparatively small space. There are some points that we should like to see altered in another edition. Here are some taken at random. For instance, there is no mention of Billroth's operation for excision of the tongue; ligature of the lingual artery is said to be performed only to arrest hæmorrhage from a cancerous ulcer. There is no mention made of Fenwick's operation for excision of the knee (although Mr. Davy's tenon and mortice operation is described). The late Mr. Heaton's operation for the radical cure of hernia is not alluded to. In describing infiltration of urine, it is said that it is most frequently extravasated by the rupture of the *membranous* portion of the urethra, and makes its way *through* the anterior layer of the triangular ligament to reach the scrotum. The book is so well written that it is a pleasure to read it, and it is so full of sound common sense that we have no hesitation in recommending it to our readers as one of the best of modern text-books on surgery.

The Retrospect of Medicine: Being a Half-yearly Journal containing a retrospective view of every discovery and practical improvement in the Medical Sciences.—Edited by W. Braithwaite, M.D., and Jas. Braithwaite, M.D., Lond. Vol. XC; July–December, 1884. London: Simpkin, Marshall & Co.

Braithwaite's Retrospect comes to hand as usual, and is no doubt appreciated as much as ever. The cream of the current literature for the half year is always skimmed off with much judgment, and but few points of value escape being put away here for easy reference. It is to be hoped that the rich stores contained in these volumes are widely availed of in this country.

Elements of Practical Medicine.—By Alfred H. Carter, M.D., Lond.; M.R.C.P., Lond.; Physician to the Queen's Hospital, Birmingham, &c. Third edition. New York: D. Appleton & Co.

This work is intended and adapted for the use of students.

It is, as its name implies, elementary. It gives in as concise a form as is possible the essential features of all the leading classes of diseases, with directions for diagnosis and treatment. It can by no means take the place of a complete treatise or text-book of medicine, but will no doubt prove useful to beginners and to others desirous of obtaining the general facts relative to functional and organic disorders, and who do not pretend to go deeper into the subject. The object in view is fully attained, and it can be recommended as a reliable and carefully prepared hand-book.

Books and Pamphlets Received.

Transactions of the College of Physicians of Philadelphia. Third series. Vol. VII.

Cocoaine and its Use in Ophthalmic and General Surgery. By H. Knapp, M.D. New York and London: G. P. Putnam's Sons.

The Therapeutics of the Respiratory Passages. By Prosser James, M.D. New York, Wm. Wood & Co.

A Manual of the Medical Botany of North America. By Laurence Johnson, A.M., M.D. New York, Wm. Wood & Co.

Diseases of the Urinary and Male Sexual Organs. By Wm. T. Belfield, M.D. New York, Wm. Wood & Co.

The Year-Book of Treatment for 1884. A Critical Review for Practitioners of Medicine and Surgery. Philadelphia: Lea Brothers & Co.

A Manual of Organic Materia Medica, being a Guide to the Materia Medica of the Vegetable and Animal Kingdoms, for the use of Students, Druggists, Pharmacists, and Physicians. By John M. Maisch, Ph.D. Second edition. Philadelphia: Lea Brothers & Co.

Human Osteology, comprising a description of the Liver, with Delineations of the Attachments of the Muscles, the General and Microscopical structure of Bone and its development. By Luther Holden, assisted by James Shuter, F.R.C.S., M.A., M.B. Cantab. With numerous illustrations. Sixth edition. New York: William Wood & Co.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Dec. 19th, 1884.

T. G. Roddick, M.D., President, in the Chair.

PATHOLOGICAL SPECIMENS.

Dr. Kennedy exhibited some inky-black sputum expectorated by a middle-aged man, a painter, who enjoys good health. He has been expectorating this black sputum for about seven years; never much at a time, but lately is rather worse. It comes

just after a slight cough, and is at first viscid. He has never inhaled carbon. There are over his body several melanotic spots. Dr. Kennedy suggested that he may be eliminating pigmentary matter from the lungs. It was not chemically examined. Dr. Kennedy promised to further investigate this case, and bring it again before the Society in the form of a paper.

Malignant Disease of the Œsophagus, causing stricture.—Dr. Ross exhibited the specimen and related the case:

J. W., aged 54, was admitted to Hospital Dec. 10th, 1884, suffering from a severe attack of acute pleurisy, with effusion, commencing twelve days before. *Previous history*—Difficulty in swallowing for six months previously, beginning with sudden obstruction in swallowing glass of hot spirits; since then was unable to swallow solids, but could readily take liquids; was a hard drinker, and a subject of constitutional syphilis; no family history of cancer. Owing to patient's serious condition, no examination by bougies was made, but he stated that three months before admission Dr. Perrigo had treated him for stricture of gullet, with some benefit; he stated also that he had lost weight rapidly since beginning of illness. Patient, from the first, was very weak, gradually sank, and died on Dec. 17th. *Autopsy*—Right pleura contained 40 ozs. thick, yellow, very turbid serum. Right lung collapsed; surface covered with a thick sheeting of lymph; no pneumonia. Left lung normal. Heart normal. Œsophagus, at level of bifurcation of trachea, presented a large, deep ulcer, with shreddy base measuring three-quarters of an inch by one-and-a-half inches; edges not indurated, but rather excavated, although base is thickened and a small lump of glands beneath base were enlarged and firm, and projected into left bronchus, shewing beneath the mucosa (which is intact) as a firm mass the size of a large bean. No secondary nodules elsewhere. No signs of syphilis. On microscopical examination, base of ulcer showed an epitheliomatous growth, the cells being arranged in columns and nests.

Dr. Perrigo said he had passed a bougie down this man's œsophagus on two or three occasions, with relief to the dysphagia for a time.

Dr. Mills said that German investigators had proved by experiments that a band of muscles of the œsophagus or intestines may be excited into contraction and remain so for a long time, like a tetanic spasm of a voluntary muscle.

Dr. Smith said this patient came to see him about three or four months ago, complaining of difficulty in swallowing and cough. He diagnosed malignant disease, and sent him to Dr. Perrigo.

Dr. Mignault said he had a patient, a nun, who has periodic attacks of dysphagia, which he was always able to relieve by a hypodermic of morphia. His patient, ten years ago, drank by mistake a strong solution of potash. He believes there is an old cicatrix in her œsophagus, which becomes irritated and sets up spasm.

Dr. Campbell said that a duodenal ulcer will at times allow food to pass over it and at other times will not. He related briefly the history of a patient of his who died from hæmorrhage of an ulcer in the duodenum, in whose case these symptoms existed.

Dr. R. L. MacDonnell read a paper entitled "*A Year's Medical Work in the Out-patient Room of the Montreal General Hospital*," in the course of which he read very many reports in brief of some of the more instructive cases he had met with during the year ending May 31st, 1884, together with remarks upon the clinical features peculiar to the cases noted, as well as to those met with in out-patient practice generally. The paper included more particularly remarks upon three cases of lead palsy, in two of which no distinct history of metallic poisoning could be traced, while in the third, colic and wrist-drop had followed the prolonged use of tinned vegetables. Two patients with locomotor ataxia had presented themselves, and one of tabes in its pre-ataxic stage, the symptoms present being recurring gastric attacks, one with hæmatemesis, at first supposed to be caused by alcoholism, followed by temporary derangement of vision (Argyll-Robertson pupil), slight numbness of the feet, and loss of knee-jerk. There was a history of syphilis in all. A case of primary lateral sclerosis of the cord, in a boy aged 12, was also described.

Fissure of the Anus.—Dr. Kennedy related a case which he was treating by passing a rectal bougie. The use of hydrochlorate of cocaine renders the operation painless.

Stated Meeting, January 9th, 1885.

T. J. Alloway, M.D., First Vice-President, in the Chair.

Case of Hernia, with great hypertrophy (elephantiasis) of scrotum.—Dr. T. D. Reed showed photographs and gave the following account:—The patient, a French-Canadian, aged 60, applied at the Montreal Dispensary recently for treatment of œdema of left leg. On examination, he was found to have a very large pyriform tumor projecting from the pubis, reaching to within one inch of the patellæ, measuring 14½ inches in length and 30 inches in great circumference. The man had had an irreducible hernia of the right side of several years' standing, and thought the scrotum had been increasing in size for about fourteen years. The dragging of the mass, the estimated weight of which was 14 lbs., on the pubic tissues had resulted in burying the penis completely, which could be traced from a groove on the side of the tumor. Dr. Reed considered the mass to be in the upper third, hernia; in the middle, hydrocele; and the lower, hypertrophied scrotal tissue. There was a sinus in the solid portion, from which exuded a watery fluid. The surface of this part was uneven, and the skin adherent. The patient had no difficulty with the bowels, and the belly was rotund. To urinate, the patient would elevate the mass with the hands, and pushing himself against some object, as a chair-back, bring out the glans. The urine was examined for albumen, with negative result. Under treatment, the œdema of the leg diminished. Surgical interference with the tumor was refused. The patient could walk long distances at a moderate pace.

Removal of an enormous stone from the bladder.—Dr. Hingston exhibited to the Society an enormous calculus removed by him from the bladder by the lateral method. He said his object in doing so at so late a period was in consequence of the advocacy on this and the other side of the Atlantic of the supra-pubic

method for stones of large size, an operation which, even with Petersen's modification, he considered a serious one. He said the *Medical News* of Philadelphia had mentioned the removal of a stone weighing three ounces by the supra-pubic as worthy of record; and Sir Henry Thompson, in the *British Medical Journal* for July, had stated: "no incisions can be made in the region which belongs to that operation" (the lateral) "through which a calculus of three ounces or more can be extracted." The calculus Dr. Hingston exhibited weighed five ounces and five drachms when removed in July 1873, by the lateral method. It was a somewhat flattened ellipse, and measured in breadth, $2\frac{1}{4}$ inches; length, $3\frac{1}{8}$ inches; thickness, $1\frac{1}{4}$ inches; greatest circumference, 9 inches. It was composed of uric acid, with one end covered with a half-inch coating of phosphates. The patient, a young man, 21 years of age, made an excellent recovery, and returned to his home in Syracuse, in the State of New York.

Dr. Wood exhibited a man with only one leg, the tibia of which, he thought, had had a piece knocked off by the man's having fallen on a shovel.

Dr. Hy. Howard said it was difficult to be sure, as everything was healed up, and there was no other leg to compare it with.

Dr. Alloway related the history of a case which he stated was of more interest from its extreme rarity than of serious importance to the patient. The patient, a young married lady, mother of two children, youngest about four years of age, consulted him about one year ago concerning a pain in her right side, backache, and general decline in health. On making a vaginal examination in Sims' position, a large cyst-like, blueish body occupied the whole of the posterior fornix space, and so overlapped the vaginal portion of the cervix and os uteri that it was with difficulty the cervix and os could be at first discovered. The cyst proved to be purely submucous, and its fluid contents separated the mucous membranes from the submucous tissues from a point extending from the os up the posterior surface of the vaginal cervix, and down a short distance on the posterior vaginal wall. At this time there was a slight catarrhal

condition of the cervix, but no evidence of there having been ulceration or previous attack of pelvic inflammation. He kept the patient under observation for nine or ten months, and observing no change having taken place in the cyst during that time, concluded that it probably resulted from injury incurred during the last confinement, and had existed ever since. From its size and position, it was quite possible for it to have acted as a bar to conception during all this time. A piece of the wall of the cyst on the cervix was removed with the scissors, and about an ounce of greenish, limpid serum escaped. The fornix and vagina were packed with cotton, and the patient kept in bed for a week. There is a slight discharge of serum yet, and it may require, at some future time, brushing over internally with iodine or other irritant to complete the obliteration. The abnormal symptoms complained of at the time by the patient have disappeared. Dr. Alloway exhibited a diagram showing the position of the growth, and said he had never met with a like condition, nor had he been able to find such an one recorded.

Stated Meeting, January 23rd, 1885.

T. J. Alloway, M.D., First Vice-President, in the Chair.

PATHOLOGICAL SPECIMENS.

Broncholiths.—Dr. Smith showed two small calcareous masses about the size of half peas which had been expectorated by an old man having senile catarrh. He has been expectorating four or five of these daily for the past eight or ten years.

Dr. Bell said he thought these little masses may have come from calcareous bronchial glands similar to some he has met with in the post-mortem room of the General Hospital.

Large Tonsillary Calculus.—Dr. Smith removed this from a boy aged 10 years. It weighed forty grains and measured 2 by $1\frac{3}{4}$ inches.

Dr. Bell said he had removed a calculus from Wharton's duct which had caused so much inflammation as to mislead some other doctors into believing the patient had malignant disease.

Uterus with Fibroid Tumor; Tait's Operation.—Dr. Trenholme exhibited the specimen and related the case. The uterus was removed post-mortem from a woman aged 30, upon whom he had performed Tait's operation on the 7th of this month. She had suffered for years with pain on the left side and dysmenorrhœa in spite of all treatment. An examination revealed a uterine fibroid of the left side, with an enlarged ovary, and the parts about were thickened. Before the anæsthetic was administered, a hypodermic injection of $\frac{1}{6}$ grain of morphia and 1–1000 of atropine was given. The operation was a difficult one. There was an inch and a quarter of adipose tissue before the sheath of the rectus was reached. When the hand was got in, a membrane was felt, which was perforated by the fingers. The right ovary, twice its natural size, was first removed along with the tube. It was much more difficult to get the left into view. It was removed (not enlarged), with but the fimbriated end of the tube. There was smart hæmorrhage, which was, after a time, controlled, and the wound brought together. Peritonitis set in twelve hours after. In forty hours it was thought there might be fluid, so the wound, which had healed completely, was opened, when five or six drachms of pus escaped. The wound was left open and the pulse improved for a time, but she died 76 hours after the operation. She had urinated naturally, but there had been no escape of flatus. She died from peritonitis and septicæmia. Drs. Armstrong, Wood and J. J. Gardner were present at the post-mortem. The uterus was found anteflected, and on its left cornu was a small fibroid tumor.

Dr. J. J. Gardner, who performed the post-mortem, said there were the signs of a general peritonitis; pus was all over the intestines. Both sides of the omentum were adherent to Poupart's ligament. The perforation made by Dr. Trenholme was seen.

Dr. Cameron, who assisted Dr. Trenholme, said there were present evidences of previous inflammation, and that a great deal of handling and forcing were needed. The situation of the tumor and the adhesions made it difficult to sponge all the blood out. The fibroid tumor, from its situation, made it at first appear as if they had a double uterus to deal with.

Dr. Stewart asked why a drainage tube was not used.

Dr. Trenholme said he had never yet used one. He would have used it in this case, but thought it was not needed.

Dr. Stewart said it was the practice for surgeons who do not use full antiseptic precautions to use a drainage tube. This patient died from suppurative peritonitis.

Dr. Hy. Howard asked if a surgeon would not be justified in staying his hand from proceeding further when so much difficulty and danger presented themselves.

Dr. Wm. Gardner said that if adhesions contraindicated operation, only about half the cases operated on would be attempted.

Dr. Alloway remarked that this case showed how difficult it was to prevent sepsis in cases where old inflammations existed. The symptoms here tally with Emmet's views, viz., that the dysmenorrhœa is due to a parametritis.

Ovarian Cysts from a case of Double Ovariotomy.—Dr. Gardner exhibited the sacs of the two cysts removed by him from a woman aged 31, unmarried. They were of slow growth and began on the right side. The only distress had been pelvic pain. The right side of the abdomen was distended to about the size of an adult's head. The left tumor was the size of an orange, and the uterus lay between them. The first cyst was easily managed. It was much more difficult to get at the second, as it lay below and behind the uterus in Douglas' fossa, and was adherent to the uterus. It burst, and the contents being a tar-like fluid, it was not easy to remove it all. Warm carbolic acid solution was used, but did not dissolve it. The fluid in both cysts was of a dark-brown color, from old hæmorrhages into them. A glass drainage-tube was used. Patient died the third day of peritonitis. No pus escaped till the very last. About two ounces of bloody serum came away each day. The operation was performed under strict antiseptic precautions. It is the experience of all that long operations are very fatal. Sir Spencer Wells' percentage of deaths in double ovariotomies is 34.15. Mr. Lawson Tait's figures give a better shewing.

Dr. Alloway exhibited a *decidual cast of the uterus about twenty days old.* The points of interest were the distinctness

with which the embryo-formation could be seen through the membranes, and the formation of the decidua reflexa as it arched over the ovum-sac, but which had not been quite completed, leaving a transparent facet looking towards the interior of the uterus, and through the membranous walls of which the embryonic cell-formation could be distinctly seen. Dr. Alloway drew attention to the evidence this specimen bore towards the correctness of Cost's views in regard to the formation of the decidua reflexa.

A LOCAL ANÆSTHETIC.

Dr. Lapthorn Smith read a paper on the use of a mixture of about equal parts of chloral hydrate and camphor as a local anæsthetic. He stated that when placed in the solid form together in a bottle they soon produced a clear, thick liquid, which, when applied on a piece of lint, covered with oil silk, to a painful surface, complete analgesia resulted. He reported three cases in which he tried it with good success. The first was a whitlow of the finger, which the patient refused to have opened. Shortly after applying it the pain disappeared, and three days later it was lanced and the pus let out without the patient, a young lady, experiencing any pain whatever. The second case was a very painful bubo, which completely disabled the patient, a gentleman, from doing his work. The mixture of chloral hydrate and camphor was applied frequently on a piece of lint, with the result that a few hours after the first application he was so much relieved that he returned to his duties next day, and fluctuation becoming evident a few days later, it was opened, the operation causing only about a quarter of the usual amount of pain. The third case was an operation for the removal of a large sebaceous cyst of the face, which was removed after the frequent application of the local anæsthetic for several hours previously by means of a brush. The incision in the skin was almost painless, but it produced no effect upon the deeper structures to which the cyst was firmly adherent. The action of the anæsthetic is much less marked on healthy than on inflamed and painful skin.

Dr. Reed was familiar with the compound. G. E. Saunders

of Montreal had shown that this is a simple mixture of the ingredients, and not a true chemical compound. Dr Reed would suggest the solution in chloroform as a topical application.

Dr. Stewart had used a mixture of chloral and camphor for neuralgia, but now uses menthol.

Dr. Gurd has found an ointment made by mixing half a drachm each of camphor and chloral hydrate to one ounce of lard of great benefit in pruritus.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

Jacobi on Bacteriology.—Ptomaines are often met with in the presence of bacteria. Is it the latter which produce them? Do they so decompose the albumen of the tissue that a ptomaine must or can develop? Or is it their own vital change which produces it? Most modern writers—not chemists—believe it. But if the cause of decomposition of the living or dead be not bacteria, but a chemical poison, after all, is it necessary to assume that the poison cannot form except through and with the presence of bacteria? And is the bacterium the only poison? or the only source of the poison? If deadly poison, such as we know to destroy life suddenly, or almost suddenly, and of such virulence as is reported in what was formerly believed to be legendary only, but which may be historical, will almost invariably originate in the dead body, is it so impossible that it may develop in the still living under certain circumstances? Have we not had enough yet of the monthly instalments of new bacilli which are the invariably correct and positive sources of a disease, and replaced by the next man who comes along? Have we not enough of the statements that, as for instance, several bacilli are claimed each to be the only cause of diphtheria, by several observers, that there may be several distinct bacilli, every one of which can produce the same scourge? Is it not just as safe still to presume that, when several forms of bacilli are believed to be such sole causes, that the real cause is in neither? Exactly so, neither

in one nor in the other, notwithstanding it all appeared settled. For our journals are replete with the latest authentic bacterium of diphtheria. This time it is neither Klebs nor Eberth, but Loeffler. Reports, discussions, and even editorials, carry his name over the world. The very nature of diphtheria is said to be revealed again, as several times before ; still the discoverer admits that there are cases without the bacterium. The matter is becoming ludicrous. I begin to fear something like the rebellion against piano-playing in a large European city. Is not music a godly art, and the piano a blessing to the musician? But the playing of fifty thousand beginners in a large city is a nuisance. When bacterio-microscopy in the hands of beginners becomes noisy like piano-playing—noisy in books, pamphlets and journals—a gentle protest is permissible. That protest is not meant for the masters, who know how to wait and to mature. I do not speak against Robert Koch and his peers, who all of them are more modest than his followers. When the kings build the cartmen are kept busy—and boisterous.

A dozen years ago the coccus of whooping-cough was said to be discovered. There was no doubt about it. There was whooping-cough, there was a coccus, what was plainer and more conclusive? To cure whooping-cough nothing is required but to kill the coccus. Quinine will kill a coccus, quinine cures whooping-cough. Since that time there is no more whooping-cough in existence ; or, if a case would be malevolent enough to turn up, it could not last longer than until a few whiffs of quinine can reach it. That is ludicrous, is it not? But it was preached like gospel, and it was believed. Many more such have turned up, and will turn up for coming years to smile at. There is a peculiar feature in this bacteriomania. Its principal impetus it received in Germany at a time when great changes had taken place in its political and financial affairs. All at once there was an empire, of which historians so much spoke, youth so much dreamed, romancers so much fabulated. All at once, at the same time and a decade before, an unusual industriousness, commerce, enterprise and unwonted wealth, and still more expectations than wealth ; all at once an influx of five thousand

millions of francs, not earned by honest work, but conquered by war, which could not turn the poor heads and unstable the solid foundations of regular development. From that time dates the lack of safety and steadiness in German financial circles. They have even invented a name for that period of swindling, "gründerthum." Speculation was rife—fortunes were made in a day from nothing but self-assertion and daring, and lost as quickly. The moral and intellectual atmosphere created by these tendencies is never breathed by one class of people only. If self-assertion can make a fortune in finance, why not in science? If a reputation may perhaps be made by a stroke of chance, why not try that chance? Speculation was rife. Any young man can look through a microscope, perhaps he will draw the prize in the lottery of alleged science. Looking would be all right, if he would not write. Medical life would be easier if there were less journal articles containing the latest infallible discoveries. Thus it has come to pass that German medicine has a two-fold aspect now-a-days. The days of her superiority are not over yet, her greatest men still live, and the toiling thinkers are at work, but the number of speculators is immense. A great many of the articles printed in the journals of the last ten years have been prematurely published, the number of preliminary notices announcing discoveries under way is very large. The great embryo cannot wait. He is afraid of having his celebrity snatched away from him by the next-door microscopist. Thus it is that we often find a difficulty in keeping our eye on the great lights, whose rays are always welcome. If learned and thoughtful specialism has its justification anywhere, its field is the solution of the mooted questions alluded to. Thus far I claim, however, that in regard to bacteriology, the main questions are before the medical world still. I firmly hope the Academy will prove the centre of critical researches by which the problem, whether bacteric or chemical poison, still a mystery, will be carried nearer its solution.—*Medical News.*

Dr. H. C. Wood on Treatment of Bronchitis.—It is not generally known that alkalies in large doses are amongst the most efficient of sedative expectorants. The citrate of potassium is much the most eligible for adminis-

tering alkaline expectorants; of it half to one ounce should be given in 24 hours. The following prescription has been tested during four to five years, and found to be much the most reliable and sedative cough mixture that I have ever used:—℞. Citrate of potash, one ounce; lemon-juice, two ounces; syrup of ipecac, half ounce; syrup enough for six ounces. Dose—Tablespoonful four to six times a day. When there is a good deal of cough or any excessive susceptibility of the bowels to loosening medicine, paregoric should be added in small quantity. The ipecac should be varied according to the susceptibility of the patient's stomach. Sometimes it can be advantageously substituted by tartar emetic. Usually two to three days of such medication will establish free expectoration. Then the stimulant expectorants are required, or squills and seneca, the former being the more valuable, though I cannot affirm that I have obtained positive results from their use, and think much of their reputation is based upon tradition and natural tendency of the disease to subside. Even squills is inferior to the mur. of ammonia. Like all ammoniacal preparations, this must be given at short intervals to maintain constancy of effect. The action of the single dose can scarcely last over two hours. Its acridity and disagreeableness may be somewhat covered by glycerine. In very large amounts all ammonia salts are capable of acting on the crasis of the blood as alkilies, and causing great vital depression. The value of copaiba in chronic bronchitis has been long recognized, and it may sometimes be used with advantage in obstinate subacute bronchitis. When the "cold" in children is obstinate, "syrup of garlic" is very efficacious. But the stimulant expectorant which in my hands has almost replaced others of the class is the oil of eucalyptus. It may be administered in ordinary cases of adults to the amount of about forty minims a day. Its taste is so pre-eminently disagreeable that it should be given in capsules, each of which may contain ten minims; or, if the patient prefer, two capsules of five minims each may be taken at a dose. The oil appears to be slowly absorbed and eliminated, so that four times a day is often enough. In emulsion it is very apt to cause unpleasant eructations, but in capsules is usually well borne. Some stomachs will not tolerate it. Counter-irritation is very useful; the oil of amber, an old remedy, is especially valuable in young children who have so often marked nervous disturbances and a tendency to collapse, diluted with one to three parts of sweet oil, applied to chest upon saturated flannel; it sometimes acts very happily in allaying nervousness as well as internal congestion.—*Ther. Gaz.*

CANADA

Medical and Surgical Journal.

MONTREAL, MARCH, 1885.

RESUSCITATION AFTER APPARENT DEATH.

The exact period that must elapse, after apparent death from drowning, chloroform or ether poisoning, hæmorrhage, &c., when hope of resuscitation is no longer possible, has never yet been accurately determined. Circumstances, such as surrounding temperature, conditions of blood, air passages, &c., would render each case somewhat different. Of course after decomposition has set in there is no room for further hope. The question is, what early change takes place, after the cessation of respiration and circulation, which prevents life being restored, and how can we detect that change? In other words, when is death apparent and when real? This question has never been satisfactorily answered. Cases of trance, asphyxia and syncope frequently so closely resemble real death as to deceive medical men. Again, there are on record well-authenticated cases of apparent death brought about by effort of the will, as, for instance, the case, quoted in all works on forensic medicine, of Col. Townshend, who could, by an effort of the will, become apparently dead for periods of upwards of half an hour, thus showing that after the cessation of circulation and respiration the "vital centres" do not perish immediately. Regarding resuscitation after apparent death, a remarkable statement is made by a Mr. G. A. Armitage of Denver, Colorado, in the *Scientific American* of the 7th of February last. The statements are so remarkable, and the cases detailed so devoid of that scientific accuracy which we look for in experiments having results so startling, that we, on reading them, strongly suspected a hoax like that which emanated from Australia some years ago

with regard to keeping animals frozen for months and revivifying when required. The experiments are as follows :—

A small terrier dog was bled to death, and exhibited all the signs of death, such as glazed eyes, rigor mortis, &c. He was then left for three hours in a room having a temperature of 70°F. At the end of that time he was placed in a warm bath (105°), and " was continually and thoroughly rubbed " and half a pint of hot water injected into his stomach ; artificial respiration was then practised by means of a bellows working through a tube placed in the trachea ; blood was now taken from a large Newfoundland dog and transfused into some bloodvessel (not specified) of the dead dog ; when a pint of blood had been transfused, the eyes began to look brighter, soon a tremor passed through the dog, and he gasped. Artificial respiration being still continued, the dog struggled and soon began to whine (the tube in the trachea being removed), and in 22 minutes after the first blood was injected he sat up, soon drank broth, and walked about. He was running about the streets in two days, and when the article was written was in " rugged health."

The next experiment was made on a calf six weeks old. It was bled to death and left for *twelve hours* before attempts were made at resuscitation. It was then treated in the same way as the dog, and after 35 minutes was completely restored and drank some milk.

The third experiment is more remarkable still, and it seems as if the experimenter was testing the amount of credulity his readers were capable of by grading the improbability of his stories. A dog was forced under water and drowned, then laid in a warm room for four hours, with his head down to drain off the water ; he was then rubbed whilst in a warm bath for an hour, his veins being opened in three places to allow any blood to escape. Then transfusion was performed, and " after fifty minutes' anxious labor, the poor beast whined piteously as life was once more being enthroned within him," and eventually completely recovered.

The fourth case is that of a dog which was first strangled and then frozen, but the experimenter has not the courage to tell his readers that he succeeded here in restoring life, but relates how,

after four hours labour, the case was given up as hopeless. The dog was, in truth, dead. Mr. Armitage throws out hopes, however, that he will yet succeed in restoring frozen animals to life.

In a letter to the editor of the *Scientific American* following the article, Mr. Armitage mentions a fifth case of a dog which had been bled to death on January 21st and restored after eighteen hours. He wishes, he says in conclusion, to have these experiments repeated by others and his own work corroborated. The addresses of the individuals owning the dogs and calf are given at the end of this incredible article, and it says on application the animals will be shown to visitors.

Almost at the same time as these experiments were published, Mr. C. E. Jennings, F.R.C.S., of London, reports (*Lancet*, Feb. 1885) a series of experiments which he had lately performed at Ghent to demonstrate the feasability of restoring to life animals poisoned by chloroform by transfusion of blood and saline fluid. The experiments number 17, and each is given in detail. By these experiments Mr. Jennings has proved that by using artificial respiration, depleting the apparently dead animal, and injecting blood or a saline fluid, artificial circulation can be established, and life be saved nearly three minutes after apparent death. Further, if ammonia be exhibited prior to the administration of chloroform, life may be saved if the injection of saline fluid be made eight minutes after cessation of the pulse, and six minutes after cessation of respiration. In one case life was restored fifteen minutes after apparent death, but the animal subsequently died. Mr. Jennings deals with minutes where Mr. Armitage deals with hours. The principle of restoration is much the same with each, viz., depletion, artificial respiration, and transfusion. The practical points taught by Mr. Jennings' experiments are: 1st, Before giving any anæsthetics, to administer a full dose of sal volatile to preserve the fluidity of the blood in case of death. 2nd, If depletion and intra-venous injection be performed quickly, after apparent death, before coagulation of the blood has commenced, pulsation will be restored, and the patient's life will be saved.

To our readers we leave the task of drawing their own deductions from the remarkable experiments of Mr. Armitage. We ourselves await further light on the subject.

—This year's lenten lectures at the Royal College of Physicians were opened on Thursday by Dr. Osler of Philadelphia, who chose for the subject of his Gulstonian Lectures the fascinating disease known as Ulcerative Endocarditis. His first lecture was devoted to the naked eye and microscopic pathology of the affection, its clinical history and etiology being left for discussion in the lectures to be delivered on Tuesday and Thursday in next week. Dr. Osler, however, began by suggesting that, instead of the numerous classifications which had been suggested, cases of the disease should only be divided into simple and malignant. After describing the naked eye appearances and favorite situations of the vegetations und ulcerations characteristic of the disease, as deduced from an analysis of 200 cases, the lecturer proceeded to demonstrate their microscopic features, showing the vegetations to be mainly composed of a granular mass of micrococci, seated upon a layer of neoplastic segments, and capped by a layer of fibrine derived from the blood current. His own specimens inclined him to the view of Klebs, that the micrococci gain access to the endothelium directly from the blood. This part of the lecture was illustrated by numerous pathological preparations, photographs, and microscopic sections. The lecturer, after mentioning that the right side of the heart is rarely affected—viz., in only nine out of the 200 cases—proceeded to describe the secondary phenomena of the disease in other organs of the body. Amongst them he drew especial attention to the occasional occurrence of suppurative meningitis, which was met with in 25 of the 200 cases. The spleen and kidneys were the most common seats of infarcts, the intestines and stomach less frequently, while the lungs were not often affected except when the ulcerative lesions were in the right heart. The lecture was mainly extempore, lasted the ideal 45 minutes, and was unusually well attended. Dr. Osler, as might have been expected, was most cordially greeted, and there can be no doubt that his lecture was such as was well worth while his coming across the water to deliver.—*Medical Times*, Feb. 28.

—The Royal Medical and Chirurgical Society held its annual meeting on Monday, the 2nd inst. We believe it has been arranged to hold a discussion on "Cholera," commencing on March 24th, the debate to be opened by the President, Dr. Geo. Johnson. Drs. Klein and Gibbes, the members of the

late Cholera Commission to India, will likely take a prominent part in the proceedings.

—Alderman Gray, the well-known and energetic druggist, has been appointed chairman of the Board of Health. We congratulate him upon this mark of the estimation in which he is held. There is no doubt that this year, of all others, much will be expected of our sanitary authorities, and we firmly believe that the citizens will not be disappointed in looking to Alderman Gray for the inauguration of a new era in the working of the Board. Radical measures of reform are necessary, and these we shall hope to see begun without a day's delay.

—The final section of Prof. Ziegler's text-book on Pathological Anatomy has just appeared, and Dr. Macalister's translation will also doubtless be shortly forthcoming. The division includes sections on the eye and ear, on the bones and joints, muscles, and male and female generative organs, as well as the mammary gland.

—The *Index Medicus* has ceased publication. Sufficient support could not be obtained to place it upon a paying basis. The loss of this valuable periodical will be felt by everyone requiring references to the current medical literature.

—John Marshall, F.R.S., F.R.C.S., who delivered the last Hunterian oration on February 14th, has resigned the chair of Surgery at the College and the post of Surgeon to the University College Hospital.

—W. D. Oakley (McGill, '79,) was admitted a member of the Royal College of Surgeons on the 30th of January last.

Obituary.

Dr. Braithwaite.—The death is announced of Dr. W. Braithwaite of Leeds, in his 78th year. His name is more particularly associated upon this side of the Atlantic with "The Retrospect of Medicine" which he commenced to publish in 1840.

Prof. Louis Elsberg of New York—was one of the earliest laryngoscopists and teachers of that branch in New York, and his reputation in his own department stood deservedly very high. Dr. Elsberg was well known in Montreal, and was a favorite with our local physicians as a consultant in throat cases. His last visit to Montreal was during the late meeting of the British Association, at which time he took part in the discussions of the Canada Medical Association.

Medical Items.

—It is said that Dr. Koller, the discoverer of the anæsthetic properties of cocaine, has recently fought a duel. His antagonist, one of Billroth's assistants, received a wound that may prove fatal.—*Boston Med. & Surg. Journal.*

—Dr. Carl Seiler, Lecturer on Diseases of the Throat, University of Pennsylvania, Philadelphia, Pa., says:—"I have used the preparation called BROMIDIA, as manufactured by Battle & Co., of St. Louis, both internally and locally by means of a spray, in cases of throat affections, and found it admirably suited to certain cases."

—Prof. Dr. R. Fresenius of Wiesbaden, Germany, has made an analysis of Mellin's Food for Infants and Invalids, of which the following is a summary:—

Total Carbohydrates	72.56
Albuminoids	9.75
Salts	4.37
Moisture	13.32
	100.00

Starch and cane sugar, none; reaction, alkaline.

A copy of the detailed analysis and remarks of this first chemist in the world may be had by application to Messrs. Doliber, Goodale & Co., 41 and 42 Central Wharf, Boston, Mass.

TREATMENT OF CHOLERA.—In view of the possible visit of cholera to this country during the present year, any contribution to medical literature bearing upon the treatment of this disease should receive careful and earnest consideration on the part of the medical profession. By the researches of Dr. Koch, it is now known that acids are most useful to kill the cholera microbe, and have been successfully employed by the profession in Europe. Dr. Chas. Gatchell, of Chicago, in his "Treatment of Cholera," says:—"As it is known that the cholera microbe does not flourish in acid solutions, it would be well to slightly acidulate the drinking water. This may be done by adding to each glass of water half a teaspoonful of Horsford's Acid Phosphate. This will not only render the water of an acid reaction, but also render boiled water more agreeable to the taste. It may be sweetened if desired. The Acid Phosphate, taken as recommended, will also tend to invigorate the system and correct debility, thus giving increased power of resistance to disease. It is the acid of the system, a product of the gastric functions, and hence, will not create that disturbance liable to follow the use of mineral acids."

CANADA

MEDICAL & SURGICAL JOURNAL

APRIL, 1885.

Original Communications.

VALEDICTORY ADDRESS TO THE GRADUATES IN MEDICINE, McGILL UNIVERSITY.

Delivered at the Annual Convocation, March 30th, 1885.

By T. G. RODDICK, M.D., Professor of Clinical Surgery.

Gentlemen-Graduates,—On behalf of my colleagues, I congratulate you on the successful termination of your course in Medicine. The ceremony just completed virtually admits you to all the privileges and responsibilities of the profession of your choice. The document which you have severally received from the hand of our worthy Principal is a certificate of your competency to practice medicine and surgery and the various branches embraced therein. It is your just reward for the patient, plodding work and gentlemanly behaviour which have characterized you during the past four years.

I doubt not you prize greatly the parchment which you hold in your hands, but I question very much if you really appreciate its full value. I may tell you for your gratification (and I make the statement advisedly) that among the many prizes and rewards open to the ambitious student throughout the world to-day, there are very few the intrinsic value of which is greater than the diploma which this University is authorized to issue on behalf of its Medical Faculty. That you are a "McGill man" is a sufficient guarantee to the public of your ability as a physician, and among your *confrères* everywhere you will command a more than ordinary share of respect and esteem.

There are few, then, better equipped than you for the journey of life, and let us hope that you will make good use of the splendid advantages you have had, scoring many victories against injury and disease and adding fresh renown to your Alma Mater. Your success will, however, depend very much on the manner in which you apply the knowledge which you have gained here.

Remember, you are now to be thrown on your own resources. Hitherto the practical work in which you have been engaged, in the wards of the hospital, has been well supervised by some person responsible for the well-being of the cases allotted to your charge. Hitherto it made no material difference to the patient whether your diagnosis of his disease was correct or not; and in your capacity of dresser it mattered little, beyond the temporary inconvenience, if your splint pressed unduly on prominent parts or your bandage interfered with the circulation and threatened the integrity of a limb. Hitherto you have been able to leave your patients and return to your respective apartments with a light heart, knowing that your work would be well supervised and the defects therein corrected. Now, however, things are going to be vastly different with you. The tow-rope has been cut and you are rapidly floating off from the old ship, whose helmsmen have been doing the steering for you. You must now be prepared "to paddle your own canoe." It will make all the difference after this, both to your patient and yourself, whether your diagnosis and treatment be correct or not. It will not do now to overlook a pneumonia, mistake the eruption of small-pox for measles or to treat a broken bone as an ordinary sprain. Your dressings will no longer be subjected to criticism and correction, and if, through any mismanagement, your patient's life or limb is imperilled, you may have no one now to share the responsibilities with you.

I would advise you, therefore, constantly to hold a review of the knowledge you have acquired, adding fresh facts as Medicine progresses. Store up for future use the practical hints given you from time to time at the bedside. Always have the feeling that you are ready for any emergency, no matter how

grave. The bleeding artery will not cease to spurt while you are looking up your authorities to find where or how it should be secured, nor will the deadly poison stop its destructive work while you are looking up the proper antidote to administer. And here I would take the opportunity of advising you against being stingy with your knowledge. I have known men to go about work as if there was some great mystery connected with our art—as if to divulge any of its secrets, no matter how trifling, would be to commit an unpardonable offence against the dignity of the profession. There can be no greater mistake, and those who practice medicine and surgery in this way are constantly getting into trouble. Thus how often, especially in country places, has secondary hæmorrhage proved fatal after amputation or as the result of a wound, simply from the want of a little knowledge on the part of the attendants. So gangrene after fractures has gone on for days unheeded, the nurse having received the most positive instructions not to interfere under any circumstances ; whereas if she had been taught how to test the condition of the circulation, and warned to loosen the dressings on the first appearance of discoloration, such a calamity would not be likely to occur. So with medical cases, after administering a dose of some powerful drug, explain to the person in attendance what the effect of the remedy may be, and thus prevent the alarm which odd and unexpected symptoms often produce. You will find it to your advantage, then, to have one or two intelligent women in your district somewhat trained, so that you could entrust to their care any severe cases. You may perform your operations very dexterously, but without proper nursing all your skill will be of little avail.

While, however, I would wish you to be apt in cases of emergency, I would advise you always to avoid haste in forming your conclusions. When pushed for a diagnosis in a doubtful case, never be too positive. No amount of knowledge can justify one in becoming dogmatical in his opinions regarding disease. In cases of doubt you need not be idle, however ; treat the symptoms that exist while you are waiting for nature to reveal her secret. So with your prognosis ; it should always

be guarded. Excepting in the case of pronounced and advanced organic disease, never give your patients up. In the case of children this advice is especially good, because their powers of endurance and recuperation are sometimes marvellous. We too often give the charlatan a golden opportunity, by allowing him to step in and get for his absurd nostrums the credit for the cure which Nature herself had unquestionably effected. On the other hand, I would not have you wilfully deceive people. If, after fortifying your opinion by consultation with a *confrère* (and this you should always do when in doubt), you have serious misapprehensions regarding the immediate ultimate result of a case, do not hesitate to state your fears to the friends, and if necessary to the patient himself. This, however, should not be done in a brusque, unfeeling manner, but in a kindly, confiding and hopeful way. Thus, in the case of those having worldly affairs to arrange, you will often do immense service by your frank and manly behaviour, and perhaps save the survivors from the annoyance of years of litigation.

In your intercourse with your patients generally, be gentle and forbearing. To the poor, especially, be generous of your professional services and kindly in your manner. The rich man is often ungrateful and exacting, and thinks that with his gold alone he can recompense you for the days and weeks of anxious care and thought bestowed upon him. The poor man has nothing to offer but his heartfelt thanks and earnest prayers for your welfare. It is true the latter will not enrich you, but the consciousness of having done good without hope of reward should bring pleasurable feelings to the bosom of every right-thinking man. Besides, your experience will be enlarged and your prospects, in many ways, advanced by such disinterested and charitable conduct.

I cannot impress upon you too strongly the necessity for cultivating the good will and esteem of your fellow-practitioners, especially those who labour in the same field with you. Some of you, doubtless, will be going forth now in search of suitable localities in which to begin work. To you I would say—Do not enter the town or village of your choice with the demeanour

of one about to steal something. The proper course to pursue is to approach the men who already occupy the field, and in a straightforward but respectful manner announce your intention of settling among them. You will thus often disarm those who would otherwise offer a vigorous opposition, and you will captivate the good will of others by your frank and gentlemanly behaviour. Nothing can be more unseemly than the bickerings and discord which prevail among the members of the profession in some places, and too often the impatient young practitioner—the last arrival—is to blame. I implore *you* not to resort to any mean or unworthy methods to build up a reputation. Should you be consulted by the patient of a brother practitioner, be careful how you criticise his practise in his absence. The fact that you differ from him in opinion does not justify you in vilifying him. Frown down on all occasions any attempt made by designing persons to extort money under the plea of malpractice. There is seldom the faintest justification for such a charge; and what more humiliating spectacle than to see one brother arrayed against another, with an ignorant and often jubilant public looking on. Let your course, then, be a straight one, just and fraternal, and in the long run you will come in the winner.

You will by reason of your profession, sooner or later, become prominent members of the several communities in which you practice, and the temptation will offer to take part in the great political questions of the day. If you are wise, however, you will eschew politics altogether. For one medical man who makes a success as a politician, fifty fail. In all questions, however, pertaining to the health of the people you should be prepared to take an active part, disseminating a correct knowledge of those sanitary laws which, when rightly understood, are capable not only of mitigating the severity of existing diseases but actually of preventing many of them.

In conclusion, gentlemen, I would beg you to endeavour, by your every word and deed, to exalt the reputation and extend the usefulness of the noble profession which you have entered to-day. Be assured that we who have been your teachers will

not soon lose sight of you, but will continue to take that lively interest in your welfare which has characterized our conduct in the past.

May every success attend you. Farewell!

COCAÏNE HYDROCHLORATE IN DISEASES OF THE NOSE AND THROAT.

By GEO. W. MAJOR, B.A., M.D.,

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In October last, at the invitation of Dr. J. Solis-Cohen, of Philadelphia, I had the privilege of conducting with him in his consulting room an interesting experiment with cocaïne.

The case selected was one of hyperæsthesia of the larynx, and occurred in the person of a gentleman, a professor of Lafayette College. The solution used was of the usual 4 per cent. strength, and though it lessened sensibility it did not overcome spasmodic action on the introduction of a sound into the larynx. This was, in point of fact, my first practical experience of cocaïne.

Since then I have employed cocaïne solutions of varying degrees of strength almost daily, and recognize in it a most valuable aid to the treatment of disordered conditions of the upper air tract.

The great scarcity of the drug, and its almost prohibitive price, have at times rendered it difficult to obtain solutions of reliable strength and purity, and were I influenced by the results obtained from worthless samples occasionally supplied me, I should as unsparingly condemn as I now wish to commend it. The most reliable make is that of E. Merck, of Darmstadt, and if obtained sealed, stamped and in the original package, the alkaloid will invariably be found to give good results.

Solutions of cocaïne undergo, when a few days old, some slight change, and a deposit of a fungus takes place; but this, in my experience, does not in any way impair the activity of

the drug. If the cocaïne be dissolved in distilled water, to which a small quantity of salicylic, boracic or carbolic acid has been added, the solution will remain stable—and for use in the air passages these additions are unobjectionable. The strength of the solution to be employed in the upper respiratory tract depends upon such conditions as each case may present and will vary from 1 to 20 per cent.

For all practical purposes of allaying pain the ordinary 4 per cent. solution has in my hands answered every expectation, but where mere steadiness or lessened sensibility is all that is sought, a one or two per cent. will generally be found sufficient.

Before applying cocaïne to the nasal chambers or upper throat it is well, for economical reasons as also for efficiency, to wash away the protecting mucus by means of a weak alkaline spray. This simple procedure facilitates its action and saves both time and material.

Generally speaking, a period of time varying from three to five minutes is required for the production of perfect anæsthesia, and this may be maintained indefinitely by repeating the applications at short intervals; anæsthesia will, however, last unaided for ten or fifteen minutes. Cocaïne only protects those parts to which it is directly applied, and does not, in my opinion, exercise any influence on contiguous surfaces. It is therefore necessary for success that all applications should be made carefully and thoroughly. The quantity of solution required for each sitting depends upon the region and the extent of surface to be influenced, and also upon the strength of the solution employed.

Before proceeding to make painful applications, it is prudent to test the extent of the local anæsthesia by means of a probe; when the sensation is that of pressure only, as perfect anæsthesia has been obtained as is possible, or indeed, required, for superficial operations.

For the purpose of making applications to the nasal passages, I use small camel hair pencils mounted on long and slender handles; for the upper throat, brushes of the same kind, but larger; for the larynx I first apply weak sprays, and after sensi-

bility has thus been lowered, I employ the ordinary rectangular throat brush. In all the regions under notice several *coats* are generally necessary. Before dipping the brush into the medicated solution it is well, for obvious reasons, to wet it thoroughly in simple water.

For operations in the larynx a stronger solution than the four per cent. is called for, as the latter, though it aids very materially any surgical procedure, still does not sufficiently overcome spasmodic closure, and this prevents a clear view.

The action of cocaïne as a local anæsthetic is but one of many remarkable properties possessed by it.

When applied to the mucous lining of the upper air way it causes at first a slight burning sensation, followed instantly by a numbness resembling the action of very hot water minus the pain ; this is followed by a stiff, leathery feeling, accompanied by a desire to swallow, with at first a difficulty in doing so. The taste is acrid, bitter and very disagreeable, and the odor slightly vinous. Cocaïne unloads the superficial vessels, reduces swelling of the membrane by its very marked astringent action and produces blanching of the surface with which it is in contact.

Cocaïne, when administered internally, possesses the same power of narrowing peripheral arteries. This latter property has been known to laryngologists for years, and various preparations of cocoa (erythroxylon) leaves have been employed by them in cases of hyperæmia and irritable conditions of the pharyngo-larynx where sedatives have been indicated.

In cases of nasal disease, this property of contracting the soft tissues on their bones is one of very great moment, as it facilitates the view of parts otherwise invisible, aids very materially delicate manipulation and lessens the tendency to hemorrhage.

In the pharyngeal region its action is that of a sedative and astringent, and in the larynx it combines these properties with that of being a powerful voice tonic.

No remedy of modern times has in so brief a space become so widely and favorably known as cocaïne, nor has any, so far as I am aware, so well fulfilled all the promises its promoters advanced for it. There are still those who even now regard

cocaïne as a doubtful remedy, possibly founding their belief on their experience of a single case or an adulterated or inert sample.

The uses to which cocaïne may be applied in the nose and throat are legion. As a local anæsthetic it claims first place, and if properly handled it will not disappoint our most extravagant expectations.

The sensitiveness of mucous surfaces varies greatly in health and disease, and we must be prepared, if necessary, to increase the strength of our solutions should we fail to produce sufficient anæsthesia with one of lower power.

As a local anæsthetic, it may be employed in the nasal cavities to prevent immediate suffering from painful applications, as, for instance, chromic, acetic or nitric acid, nitrate of silver, and so forth ; to allay the pain caused by the introduction of instruments, as probes, snares, forceps, &c.

In the galvano-caustic method it succeeds most effectually in controlling pain, as also in the removal of tumors, outgrowths and excrescences of whatever kind. Cocaïne also contracts the venous sinuses, and aids diagnosis and manipulation by opening up a previously occluded passage. It prevents altogether, or lessens, the tendency to hemorrhage or oozing, and thereby does away with one source of annoyance and discomfort. It arrests the tendency to sneeze so frequently met with in cases of nasal disorders. In coryza it will be found of at least temporary benefit, and will do much to hasten the cure by galvano-cauterization. In nasal asthma, a more common condition than is generally suspected, it must prove a valuable acquisition. In cutting through adhesions between turbinated tissue and the septum, in removing the angles of deflected septa, and in punching the same for correction of the deviation, it has already proved a signal help.

In the vault it may be employed in the removal of adenomata or other growths, and in fact in any operative procedure in that region.

In herpes occurring on the posterior surface of the velum,

a most painful and obstinate complaint, it affords marked comfort and relief.

In the pharynx and upper throat it will be found effectual in removing painful conditions—especially if accompanied by a hyperæmic state in the various ulcerations of the tonsil, pillars and parts surrounding, of such frequent occurrence in syphilis and occasionally seen in tuberculosis; in allaying the pain of cancerous disease and aiding the power to swallow. In rheumatic pharyngitis it has afforded relief. As an application before operating in follicular disease of the pharynx, it acts with certainty in relieving pain. In uvulotomy and in extirpation of the tonsils it has given fairly good results in my hands.

In the larynx it may be used with benefit in tubercular disease, whether characterized by ulceration or simply by swelling. Its valuable astringent and sedative properties render it particularly advantageous in these cases. Its influence in the prevention of cough is, to say the least, remarkable.

In œdema of the larynx I have seen it prove useful. In ulceration of the epiglottis, ary-epiglottic folds or post-laryngeal wall, rendering swallowing painful and difficult, it will allow of the taking of ample nourishment if applied ten or fifteen minutes before the meal.

In the various forms of vocal defect, the result of improper tension or faulty approximation of the vocal bands, cocaïne, in the form of a spray or troche, will render the voice more clear and powerful and less likely to break down from fatigue. Troches have been prepared to my order by Messrs. Kenneth Campbell & Co., wholesale chemists, each of which contains two milligrammes of the alkaloid. They have been found of much service by singers, speakers and others suffering from painful or relaxed throat.

In whooping-cough (though my experience has not been as great with the remedy as I should like, in order to speak authoritatively,) it has, in the few instances in which I have used it, yielded happy results. The cough has been completely checked for six or eight hours, and perceptibly mitigated for twenty or more. I believe it will score a great future success

in this malady. In all the endo-laryngeal operations it so steadies the parts that the progress of manipulation can be easily followed in the field of the mirror. Papillomata and growths of whatever nature and however small may be removed with expedition and accuracy by its aid.

For laryngeal use the 4 per cent. solution is not sufficiently powerful—8 or 10 per cent. answers much better, and even a 20 per cent. will probably be required in some cases.

In nervous subjects, when either post-rhinoscopic or laryngoscopic examinations are difficult or even impossible, it will, if used as a spray, greatly facilitate and simplify the undertaking.

We must not expect from cocaïne impossibilities; if it allays present pain, we must not regard it as a failure should after-pain ensue. In my opinion it modifies the painful character of wounds, reduces the amount of local irritation, and renders the nervous shock less.

My experience of cocaïne hydrochlorate is based on the almost daily use of it for over five months, and includes its action on upwards of a hundred and fifty individuals, representing quite three hundred sittings.

I regret that I have not kept a record of the results obtained under cocaïne in all the cases in which I have used it; but at first I regarded it only from its standpoint as a local anæsthetic, and so invariably acknowledged by my patients was its effect that I considered it superfluous and unnecessary. However, for the purposes of this report, I have tabulated a number of cases occurring in an arbitrary space of time, and give them in the order of their coming. I wish here particularly to state that there has been no attempt at selection or suppression of cases. The list includes all those in whom cocaïne hydrochlorate has been used, for any purpose whatever, from a certain date up to the time of writing. The cases are given in the order in which they came under observation, many of them, however, were already under treatment, and in some of them cocaïne had previously been used. For the purpose of accuracy a daily register was kept, and from this the accompanying statement has been made out.

The table shows the number of the case, the number of sittings, the region in which and the disease for which interference became necessary, the strength of the cocaïne application, and the character of the surgical or other procedure. The accompanying synopsis of the use of cocaïne is compiled exclusively from evidence afforded by private patients of the educated class, and may therefore be fairly accepted as an intelligent expression of the popular opinion of the remedy :—

No. of Case.	No. of Sittings	Region.	Disease.	Strength of Solution of Cocaïne.	Character of Surgical or other Procedure.
1	5	Nose and Pharynx.	Follicular Pharyngitis and Hypertrophy of Turbinated Tissue	4 per cent.	Galvanic cautery and nitric acid.
2	4	Nose	*True Membranous Nasal Catarrh*	4 "	Chromic, acetic & nit. acids, and galv. caut.
3	4	Nose	Hypertrophy of Turbinated Tissue	4 "	Nitric Acid.
4	2	Nose	" " "	4 "	" "
5	2	Nose	" " "	4 "	" "
6	3	Nose	" " "	4 "	" "
7	1	Nose	" " "	4 "	" "
8	4	Nose	" " "	4 "	" "
9	2	Nose	" " "	4 "	" "
10	3	Nose	" " "	4 "	" "
11	5	Pharynx & Larynx	Eversion of Laryngeal Ventricles	1, 4, 6 & 10 p.c	Atomized, and with brushes.
12	2	Nose	Hypertr. of Turb. Tissue	4 per cent.	Nitric acid.
13	1	Nose	" " "	4 "	" "
14	2	Nose	" " "	4 "	" "
15	2	Nose	" " "	4 "	" "
16	3	Nose	" " "	4 "	" "
17	1	Nose	" " "	4 "	" "
18	1	Nose	" " "	4 "	" "
19	5	Nose and Pharynx.	Follicular Pharyngitis, Varicose Vessels and Turbinated Hypertrophy	4 "	Nitric acid and galv. cautery.
20	2	Nose	Hyp. Middle Turb.	4 "	Nitric acid.
21	3	Pharynx	Foll. Phar.	4 "	Galvanic cautery.
22	1	Palate and Pillars	Inflamed and painful state.	4 "	As a spray.
23	4	Nose	Turb. Hypertrophy	4 "	Nitric acid.
24	4	Nose	" "	4 "	" "
25	4	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
26	1	Pharynx	" "	4 "	" "
27	3	Nose	Turb. Hypertrophy	4 "	Nitric acid.
28	2	Nose	" "	4 "	" "
29	1	Uvula	Relax'd Throat with swell'd and œdematous Uvula	4 "	Ablation.
30	2	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
31	1	Pharynx	" "	4 "	" "
32	3	Nose	Turbinated Hypertrophy & acutely deflected septum	4 "	Nitric acid and scalpel.
33	1	Nose	Turbinated Hypertrophy	4 "	Nitric acid.
34	2	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
35	1	Pharynx	" "	4 "	" "
36	1	Nose	Myxomata of both Nostrils	4 "	Cold wire snare, forceps and galv. caut.
37	3	Nose	Right Middle Turb. Hyp.	4 "	Nit. acid and galvanic cautery.
38	4	Pharynx and Nose.	Foll. Phar., Polypus of Low. Mid. Turb.	4 "	Galvanic cautery.
39	3	Pharynx	Foll. Pharyngitis	4 "	" "
40	2	Pharynx	" "	4 "	" "
41	2	Nose	Middle Turb. Hypertrophy	4 "	" "
42	4	Nose	" " "	4 "	" "

No. of Case.	No. of Sittings	Region.	Disease.	Strength of Solution of Cocaine.	Character of Surgical or other Procedure.
43	1	Nose	Ant. Turb. Hydertrophy	4 "	Nitric acid.
44	4	Nose	" " "	4 "	"
45	2	Pharynx	Varicose Vessels of Pharynx and Pillars	4 "	Galvanic cautery.
46	2	Pharynx	Foll. Pharyngitis	4 "	" "
47	3	Larynx	Whooping Cough	1 and 2 p.c.	As a spray.
48	1	Larynx	Laryngeal Papillomata	2, 4 & 8 p.c.	" "
49	2	Nose	Turb. Hypertrophy	4 per cent.	Nitric acid.
50	2	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
51	2	Nose	Hyp. Turb. Tissue and acute deflection of Septum	4 "	Galv. cautery, nitric acid and scalpel.
52	3	Nose and Pharynx.	Foll. Pharyngitis	4 "	Gal. caut. and nit. acid.
53	1	Larynx	Tubercular Laryngitis and Aphonia	4 "	Spray.
54	4	Pharynx and Nose.	Foll. Pharyngitis and Hypertrophied Turb. Tissue	4 "	Gal. caut. and nit. acid.
55	1	Larynx	Tubercular Laryngitis with incessant cough	4 "	As a spray.
56	1	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery
57	3	Pharynx	" "	4 "	" "
58	1	Nose	Turb. Hypertrophy	4 "	Nitric acid.
59	2	Nose	" "	4 "	" "
60	3	Nose and Pharynx.	" " and Foll. Phar	4 "	" and galv. cautery.
61	2	Nose	Fibroid Tum'rs of right lower Turb. and left Choana	4 "	Cold wire snare, and gal. caut. to pedicles.
62	1	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
63	3	Nose and Pharynx.	Foll. Phar. and Turb. Hyp.	4 "	" " and nit. acid.
64	3	Nose	Turb. Hypertrophy	4 "	Nitric acid.
65	3	Nose	" "	4 "	" "
66	3	Nose	" "	4 "	" "
67	1	Pharynx	Hypertrophied Tonsils	4 "	Guillotine.
68	2	Larynx	Rh'matic infl. of Arytenoids	2 "	Spray.
69	2	Nose	Turb. Hypertrophy	4 "	Galv. cautery.
70	1	Nose	" "	4 "	Nitric acid.
71	3	Nose	Coryza and Headache from pressure	4 "	Galv. cautery.
72	1	Nose	Right Mid. Turb. Hyper.	4 "	" "
73	1	Nose	Turb. Hypertrophy	4 "	Nitric acid.
74	3	Larynx	Papillomata	2 and 4 p.c.	Spray.
75	2	Larynx	Neuralgia of Larynx	2 per cent.	"
76	2	Pharynx	Foll. Pharyngitis and cicatricial adhesions of Nasal cavities	4 "	Galv. caut. and scalpel.
77	1	Nose	Turb. Hypertrophy	4 "	Nitric acid.
78	1	Nose	" "	4 "	" "
79	2	Nose	Turb. Hypertrophy and cicatricial adhesions	4 "	" " and scissors.
80	1	Nose	" " "	4 "	Galv. cautery.
81	1	Pharynx	Foll. Pharyngitis	4 "	" "
82	1	Uvula	Chronic relaxat'n of Uvula	4 "	Ablation.
83	1	Tonsil	Right Tonsil Hypertroph'd	4 "	Guillotine.
84	2	Larynx	Whooping Cough	2 "	Spray.
85	2	Nose	Right Middle Turb. Hyper.	4 "	Nitric acid.
86	1	Nose	Rt. Middle Turb. Hypert. and Polypoid growth	4 "	Galv. caut. and nitric acid.
87	1	Nose	Fusion of right middle Turbinated and Septum	4 "	Scalpel and galv. caut.
88	1	Nose	Left lower Turbinated Hypertrophy	4 "	Nitric acid.
89	4	Larynx & Trachea.	Irritable jerking cough	2 "	Frequently as a spray.
90	1	Nose	Left lower Turb. Hypert.	4 "	Nitric acid.
91	1	Nose	Right middle Turb. Hyper.	4 "	Galvano-cautery.
92	1	Nose	Left lower and middle Turbinated Hypertrophy	4 "	Nitric acid.
93	1	Nose	Right lower Turb. Hyper.	4 "	" "
94	1	Nose	Ulceration of cartil. septum	4 "	5 p.c. sol. chromic acid
95	....	Larynx	Œdema of right ary-epiglottic fold, result of pressure of Thyroid Cyst.	4 "	Spray.
96	....	Larynx	Œdema of Ventricular bands in Bright's disease.	16 milligram. daily	As a Troche.

Of the 96 cases reported, the sittings, 200 in all, were disposed as follows:—

Painful operations on the nose, as the destruction of hypertrophied turbinated tissue by means of chemical agents or the galvanic cautery	127
Painful operations on the pharynx, pillars or neighboring parts by galvanic cautery	42
Ablations of the uvula	3
Tonsillotomies	2
Removal with the scalpel of the acute angles of deviated septa obstructing a nasal passage	2
Cutting through cicatricial adhesions or fusions of turbinated tissue and septum nasi	2
Eradication of myxomata or other nasal growths by means of snares, forceps &c., with subsequent galvano-cauterization of their pedicles	5
Application of 4% solution of cocaine to inflamed and painful palate, pillars, &c.	1
Laryngeal sprays of from 1% to 10% for various purposes, as allaying cough; as a local astringent, and as an anæsthetic in the removal of laryngeal growths, &c	18

In the hypertrophic nasal cases, cocaïne was had recourse to purely as a means of allaying the suffering caused by painful procedures, and in this it succeeded admirably. Nitric, acetic and chromic acids, as well as the galvano-cautery, were employed without causing the slightest discomfort. In fact, more complaints were made by the patients when the cocaïne was in course of application than when the caustics themselves were *in situ*. Regard was, of course, had to the extent of surface operated upon on each occasion.

The operations on the pharynx and neighborhood were principally for the destruction of enlarged follicles and varicose vessels. Cocaïne here answered the threefold purpose of lessening irritability, giving steadiness to the parts and rendering the application of the galvano-cautery electrode painless. It also reduced the calibre of vessels in a very remarkable manner.

Three uvulotomies were performed in the usual fashion with traction forceps and scissors, after painting the surface with cocaïne. There was no pain during the operation, but the ordinary amount of suffering afterwards resulted.

In the case of M. R. (No. 29 of the table), the uvula was swollen and œdematous to an enormous degree. The application of the cocaïne facilitated the cutting materially by contracting and hardening the tissue. He was not conscious of any pain during the operation.

In the interval of time covered by the table I employed cocaïne but twice in extirpation of the tonsils (Nos. 67 and 83), my previous experience of it tending to the belief that the immunity from pain bestowed was largely of mental origin. Tonsillotomy is not a very painful operation unless adhesions to the pillars exist, and under the latter condition the use of cocaïne is very beneficial.

M. S. (No. 67), a dispensing clerk, came with both tonsils very much enlarged. I painted the right gland and its environs with cocaïne (4 per cent.), but to the left I made no application; of this the patient was not aware. He characterized the pain as more acute on the left or unprotected side, but was sensible of the cutting of the right gland. Cocaïne, however, when applied to the wounded surfaces stopped the bleeding and relieved the pain very satisfactorily. Its hæmostatic property is much superior to that of the Gallic and Tannic acid mixture of the Throat Hospital Formulary, and it is neither so disagreeable nor so likely to produce gagging as the latter.

In the case of A. E. T., a chemist's apprentice (not recorded above), a very delicate lad, witb enormous tonsillar hypertrophies, I removed the right gland after applying cocaïne (he says) painlessly. Some days later I operated on the left side without cocaïne, and, if I may judge from appearances, his suffering was severe. It is but fair to state that on the second occasion the tonsil was in a state of acute inflammation.

The cases (Nos. 32 and 51) of angular lateral deviation of the septum reported are two in number. Both boys had undergone treatment by galvano-cautery, etc., for destruction of hypertrophic soft tissues of the nasal passages impeding healthy respiration; one of these (No. 32) had both tonsils removed early in the course of treatment. The angle of cartilage and mucous membrane was removed to a sufficient depth to allow of

the free passage of air. In both instances no pain was suffered, and the bleeding was decidedly less than would have occurred under ordinary circumstances.

In the cases (Nos. 76, 79 and 80) of cicatricial adhesion, though pain was felt when using the shears it was comparatively trifling, and was more the result of the lateral pressure exerted by the blades on the septum and lower turbinated bones than from the wound itself.

In eradicating myxomatous and other nasal tumours by whatsoever means, cocaïne is of material assistance. Its power of contracting the soft tissues on their bones affords an enlarged field for vision and, at the same time, allows of the proper adjustment of the instrument selected. The painless nature of the proceeding also aids accurate manipulation and admits of the active cöoperation of the patient. The tendency to bleed is diminished, as is also the flow of nasal mucus. Sneezing is also well under control.

Of the cases referred to, but one need be mentioned.

W. C. (No. 36), past middle life, had suffered from bronchitis and nasal catarrh for 25 years. Anterior rhinoscopy developed the fact that both nostrils were blocked by myxomata. At the first sitting the cold wire snare engaged a large growth in the left nostril, and, despite the gentleman's struggles and protests, I suceeeded in removing the great bulk of the tumor; the pedicle, however, remained. Two days later the patient returned, when I carefully applied cocaïne to the surrounding tissue of the left nostril and removed the pedicle with the snare close to its attachment, which I then destroyed by the galvano-cautery. I then proceeded, under cocaïne, with snare and forceps to clear the right side, and succeeded in doing so. The patient, who was, at the time of his visits to me, in very delicate and feeble health, assured me that the second sitting was quite free from pain.

In the case (No. 22) of a prominent clergyman, who was suffering from an inflamed and painful throat, which rendered articulation difficult, a single application of a 4 per cent. solution conferred such immunity from pain that on the same even-

ing he was enabled to keep an appointment to deliver a public lecture. He afterwards assured me that he was never in better voice, and spoke with ease.

Of the cases (Nos. 11, 47, 48, 53, 55, 68, 74, 75, 84 and 90) in which laryngeal sprays of cocaïne had been employed, I would like to say a few words relative to those of most importance.

N. W. (Case 11), a case of prolapse of the laryngeal ventricles, has been under my care for over a year. Under the local use of cocaïne great improvement followed. The ventricles contracted much more rapidly than they had done under any previous application, though improvement all along had been evident. The left vocal cord was for the first time visible under the use of cocaïne, and the voice was better maintained and clearer. All these good effects I attribute to the astringent and sedative action of the alkaloid.

In this case a 4 per cent. solution was not strong enough to produce anæsthesia and tolerance, and I required to use a 10 per cent. to have any satisfactory result. I found in this case that the brush would produce violent glottic spasm, and substituted therefor the use of a weak spray, after which the brush, with a strong solution, was tolerated very nicely. A probe now could be borne in the larynx for several seconds without distress.

In whooping-cough the results of sprays of cocaïne are given in two cases only.

In the cases of Mrs. C. (No. 47) and A. C. (No. 84), 2 per cent. sprays afforded great relief. I do not hesitate to say that the cocaïne solutions, if properly applied under high pressures to the larynx and trachea, would soon overcome many of the difficulties presented by this disease.

Case No. 89, a lady far advanced in pregnancy, suffering from a short, jerking cough, threatening, from its violent and incessant nature, to induce a premature delivery, was instantly relieved by 2 per cent. sprays of cocaïne. About 20 or 30 minims were directed to be employed as a spray every four hours. In this case morphia, counter-irritation and many

well-known and generally reliable remedies had failed to afford any relief.

In laryngeal tuberculosis, with incessant cough and difficult deglutition it is of great service (Cases 53 and 55).

It checks the cough, facilitates expectoration, allays the tickling feeling so often complained of, and by lowering sensibility makes the swallowing of nourishment, which before has been difficult or even impossible, easy of accomplishment.

In endo-laryngeal operations for the extirpation of growths, I have but three cases to offer, only two of which have been tabulated.

Laryngeal Papillomata.—M. McB. (No. 48) presented herself with papillomatous growths of the larynx. A spray of cocaïne of gradually increasing strength was used until 8 per cent. had been reached, when the larynx became quite tolerant of handling. At the request of the patient, no attempt was made at removing the growths. Five years ago I operated on this patient for removal of growths below the cords, by opening the larynx through the crico-thyroid membrane and cricoid cartilage. They have this time, however, returned above the cords.

E. M. (No. 74), aged 7.—Four years ago I did a tracheotomy on this child for extensive laryngeal papillomata, endangering life. The size of the child's larynx did not fairly admit of any attempt at removal by the natural passages. She has worn a tube constantly since, and with the assistance of sprays *of absolute alcohol*, has succeeded in keeping the growths well under control. I have at three sittings used cocaïne by spray and brush, and have succeeded in removing, by evulsion, all trace of growths. No pain was complained of during these operations, and the larynx (an abnormally small one by the way) tolerated handling fairly.

Fibro-Cellular Cyst of Left Vocal Band.—(Not recorded on table.)—C. C., civil engineer consulted me Dec. 10, '84, for a modified aphonia, or, more correctly, dysphonia. On laryngoscopic examination, a small bi-lobular tumor was observed springing from the border and under surface of the left vocal

band at its middle. The introduction of forceps produced an alarming spasm of the glottis. After applying a solution of cocaïne (10 per cent.), the larynx became tolerant of interference, and locating the growth by the aid of the mirror, I removed it with antero-posterior cutting forceps at the first passage of the instrument. Some pain was complained of at a point below the glottis inaccessible to the application, which was made with a laryngeal brush. The tumor was of the size of a very small field pea, consisted of two lobes, and was attached to the edge and under surface of the left vocal band. Dr. Wyatt Johnston, resident physician of the Montreal General Hospital, to whom it was submitted for microscopical examination (and to whom I am indebted for a report of its character), declared it to be a "Fibro-cellular cyst undergoing mucoid degeneration." This form of growth is, I believe, of rare occurrence in the larynx.

In conclusion, I desire to express my confidence in the value of cocaïne hydrochlorate when used as a local anæsthetic in the air passages. In every case in which I have used it to allay the pain attending surgical measures in these regions, it has accomplished its purpose. In order to attain success, let me repeat that not only must the region to be operated upon be protected, but also the surfaces immediately adjoining; that the application must be made in a thorough manner, and that it must be of sufficient strength and used freely. Many of the reported cases of partial failure with cocaïne in the larynx are directly the result of leaving areas unprotected. The substitution of proper atomization for the method of application by the brush would, I am sure, render success more certain. I feel that it is unnecessary to refer to the many advantages the use of cocaïne possesses over chloroform, ether, and other anæsthetics in the minor surgery of the nose and throat. Nor need the cost of applying it be as great, as the market value of the drug would at first suggest, if the few directions I have briefly laid down be carefully followed.

Correspondence.

BERLIN, March 18, 1885.

To the Editor of the CANADA MEDICAL & SURGICAL JOURNAL.

Berlin, from a medical standpoint, has recently been so ably described in the pages of your JOURNAL that it is with no small degree of diffidence that I venture upon sending you a communication from here. I derive, however, some encouragement from the feature of forgetfulness so common to mankind, and which I hope will prevent a too close comparison between the letters in your journal from Berlin this year and those of last year.

You probably will have heard, before this reaches you, of the death of the renowned Prof. Frerichs. He breathed his last on the 14th inst. The funeral was largely attended, and all classes from royalty downwards were well represented. The Crown Prince sent flowers, and the Emperor manifested his respect for the departed man of science by sending his state carriage—the next greatest honor to his being present in person. With our democratic tendencies, we cannot fully understand the significance of *such* a mark of honor.

It is an open secret that Prof. Leyden will succeed to the chair made vacant by this recent death. But the successor to Prof. Leyden is not yet known. It is thought there will be considerable difficulty in making the appointment. Last week I attended a meeting of the Berlin Medical Society. The chair was taken a few minutes after the appointed hour (7.30 p.m.) by the President, Prof. Virchow. The large hall was well filled, and the number of gray heads contrasted very markedly with that of similar gatherings on the other side of the ocean.

The Virchow of Berlin, like his representative in Montreal (until lately), set the ball rolling by exhibiting a number of very interesting pathological specimens, among which was an enormous spleen, weighing over seven pounds, from a case of leukæmia. The specimen was sent from one of the provinces, and Prof. Virchow was unable to say whether the leukæmia

was of a malarial origin. Prof. Kücher showed two breasts affected by that rare affection, carcinomatous mastitis, that he removed from a woman a few days before. The disease had set in a few weeks before, and made very rapid strides. As there was evidence that the left pleura and lung were involved, he did not expect his patient to live more than a few days. Then came an exceedingly interesting discussion by Prof. Waldeyer on the development of connective tissue. He spoke for fully an hour without a note of any kind, keeping the large audience spellbound. Anyone that has attended a meeting of German physicians will know what a difficult task that is on most occasions.

The arbitrariness of Bismarck has lately made itself felt in a quarter most vulnerable to the pride of Germans. The honor of their famous university has been touched. It would seem the man of "blood and iron" began to accumulate within his tissues a less warlike material—adipose tissue. To reduce this accumulation he had tried several means and sought the advice of several physicians, but all in vain until he came across Dr. Schweininger, who succeeded in reducing the corpulent body by several pounds and in maintaining it in that condition. For this, Prince Bismarck awarded him the chair of Dermatology in his University. This Dr. Schweininger has no claims for such a position on scientific grounds, and is decidedly objectionable on moral ones. While practising in Munich he committed a grave offence against public decency, for which he was sentenced to a considerable term in imprisonment. None of the physicians here of any standing will recognise him, and they all keenly feel the disgrace of the appointment.

A few days ago Prof. Virchow, in his place in the House of Parliament, drew attention to the appointment in most scathing terms, denouncing it as an arbitrary act, degrading the University and corrupting public conscience.

The regular lectures ceased on the 1st of March, and will not begin again until the end of April. On the 16th of this month began what is known as the "Frener Courses" for practising physicians. These continue for about six weeks, and

comprise several courses in almost every branch of medicine. A stranger on coming here experiences "embarras de richesses," and does not know which to select. Though they are all given by able and zealous men, they are not all of equal merit.

In gynæcology, of course, Prof. August Martin stands at the head of the list. His private hospital provides him with abundance of interesting material, and he performs from one to two operations daily. From 11 to 12 he operates, then he lectures on general gynæcology for another hour, and from 1 to 3 is taken up with examinations of patients. The class for the latter purpose is divided up into sections of eight; there are three sections, and each section has two days weekly.

Dr. Guttman's course on internal medicine and physical diagnosis, at the Moabist Hospital, is excellent. This hospital is built on the pavilion plan, comprising twenty-four isolated buildings, each of which has from twenty-four to twenty-eight beds. The more severe and interesting cases are sent to it from all parts of the city. Dr. Guttmann gives an hour-and-a-half four times a week. During the first half hour each member of the class is assigned a patient, which he is to examine and make a diagnosis. Then during the remaining hour the class is taken round the wards, where Dr. Guttmann makes clinical remarks. Where there is so much material to select from, the same disease can be exhibited in different stages and of different types in different patients. For example, to-day we were shown two cases of hæmoptysis—one at the outset of phthisis, the other in advanced phthisis—and another case of slight hæmoptysis in an acute case of pneumonia. In a future letter I may say something more about the practical courses.

The approaching meeting of the German Medical Association on the 8th of April is looked forward to with great interest. That vexed but interesting subject, "Tuberculosis," is to be discussed, and several papers of importance are on the lists.

H. N. V.

Reviews and Notices of Books.

The International Encyclopædia of Surgery: A Systematic Treatise on the Theory and Practice of Surgery.—By authors of various nations. Edited by JOHN ASHURST, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with chromolithographs and woodcuts. In six volumes. Vol. V. New York: Wm. Wood & Co.

The fifth volume now issued leads on towards the completion of this monument of American enterprise. The authors have been selected with great judgment, and the various articles (of which we append below a list) contain each a complete exposition of the subject from the pen of one who is recognized as specially competent to deal with it. It is only therefore necessary for us to repeat the favorable criticism which we have made upon the preceding volumes of the series. When complete, the Encyclopædia will present a thorough and exhaustive resumé of all the modern teachings of surgery and the most approved plans for carrying these into effect. The following is a list of the articles in the present volume: Injuries of the Head, by Charles B. Nancrede, M.D.; Malformations and Diseases of the Head, by Frederick Treves, F.R.C.S.; Injuries and Diseases of the Eyes and their Appendages, by E. Williams, M.D.; Injuries and Diseases of the Ear, by Albert H. Buck, M.D.; Injuries and Diseases of the Nose and its accessory sinuses, by George M. Lefferts, A.M., M.D.; Injuries and Diseases of the Face, Cheeks and Lips, by Alfred C. Post, M.D., LL.D.; Injuries and Diseases of the Mouth, Fauces, Tongue, Palate and Jaws, by Christopher Heath, F.R.C.S.; Surgery of the Teeth and adjacent parts, by Norman W. Kingsley, D.D.S.; Injuries and Diseases of the Neck, by Geo. H. B. McLeod, M.D.; Injuries and Diseases of the Air Passages, by Solis-Cohen, M.D.; Injuries of the Chest, by Edward H. Bennett, M.D., F.R.C.S.I.: Diseases of the Breast, by Thomas Annandale, F.R.C.S.E.; Injuries and Diseases of the Abdomen, by Henry Morris, M.A., M.B., Lond.; Hernia, by John Wood, F.R.S., F.R.C.S.

Intestinal Obstruction; its Varieties, with their Pathology, Diagnosis and Treatment.—By Fred. Treves, F.R.C.S., Surgeon to and Lecturer on Anatomy at the London Hospital, Hunterian Professor of Anatomy at the Royal College of Surgeons of England. With 60 illustrations. Philadelphia: Henry C. Lea's Son & Co.

This book has been issued as one of the series of clinical manuals. It is the Jacksonian Prize Essay of the Royal College of Surgeons of England for 1883. The various forms of ileus, both acute and chronic, are here classified and described with the greatest care and minuteness, all the principal varieties being illustrated by cases and by excellent woodcuts. The various questions of diagnosis are elaborated and studied with care and judgment. The chapters upon treatment are conceived in a proper scientific spirit, the modern surgical methods receiving all due consideration, but proper caution and reserve being enjoined before resorting to the somewhat serious procedure of laparotomy or resection of an intestine. There are no cases more calculated to call forth one's skill in diagnosis and energy in treatment than those of obstructions in the bowels. The knowledge that these disorders nearly always involve more or less danger to life, and that, as they are better understood, so more and more success is being met with in their management, should lead every one to study the subject anew in the light of modern scientific knowledge. To assist him in this undertaking we know of no book so well adapted as that recently presented to us by Mr. Treves. The illustrations are numerous, nearly all from original cases, and of much value.

The Ear; its Anatomy, Physiology, and Diseases—a Practical Treatise for the Use of Medical Students and Practitioners.—By Charles H. Burnett, A.M., M.D., Professor of Otology in the Philadelphia Polyclinic and College for Graduates in Medicine, etc., etc. With 107 illustrations. Second edition. Revised and rewritten. Philadelphia: Henry C. Lea's Son & Co.

This manual of otology is large enough to contain all the

essentials concerning the normal ear and the ear diseased, and still not so diffuse that it is beyond the scope of the practitioner who would be well-informed or the student who desires a fair knowledge of this important subject. A great many general practitioners hardly realize how frequently disorders of the hearing apparatus give rise to cerebral and other symptoms of various origin, which they have failed to account for. Nor do they appreciate clearly the truly grave importance of paying careful attention to acute inflammatory affections and chronic purulent diseases of the outer parts of the ear. As regards the latter, most hospital physicians and those of considerable experience have met with cases where meningeal inflammations have been set up from these causes; and in some of these instances which have proved fatal there can be little doubt that active, early treatment or surgical interference might have saved life. These ear diseases are certainly even at this day too much neglected, and no doubt any specialist in this department must meet with many cases of hearing impaired or lost through delay in seeking suitable advice. General practitioners cannot be expert aurists, but they can, and should, know enough about these cases to treat the simple ones with judgment and to refer more difficult ones to higher skill whilst good may yet be done. We have pleasure in recommending Dr. Burnett's work as a thorough and careful exposition of our present knowledge on the subject.

Pyuria; or Pus in the Urine, and its Treatment.—By D. Robert Ultzmann, Professor of Genito-Urinary Diseases in the Vienna Polyclinic. Translated (by permission) by Dr. Walter B. Platt, F.R.C.S. (Eng.), Demonstrator of Surgery in the University of Maryland, &c. New York: D. Appleton & Co.

The substance of this little book consists of clinical lectures given by Prof. Ultzmann in the Vienna Allgem. Policlinic, Winter Semester 1882-83. They comprise the diagnosis and treatment of acute and chronic urethritis, prostatitis, cystitis and pyelitis, with especial reference to their local treatment.

The sections upon diagnosis are most interesting in connection with pyelitis or pyelo-nephritis, the treatment, however, of the latter being viewed solely from a medical point of view, for the questions of the modern surgical operations for the advanced conditions of this kind are not discussed. The lectures can be read with much profit by every one interested in attaining proficiency in the management of these common and painful disorders.

Human Osteology.—By LUTHER HOLDEN, F.R.C.S., assisted by JAMES SHUTER, F.R.C.S., M.A., M.B., Cantab. With numerous illustrations. Sixth edition. New York: Wm. Wood & Co.

This is the January (1885) volume of Wood's Library, and is a reprint of the English edition with electrotype copies of the original illustrations much reduced in size. Of course it can bear no comparison with the original English edition as to type or illustrations, but, considering the price (about $1.50), it is a remarkably cheap book. It is useless to say anything in praise of this work, as its excellence has been established and acknowledged for many years. It is the best book on osteology which has been issued up to the present time, and Holden's Osteology is familiar to every student of anatomy. The value of this edition is much increased by the valuable notes on comparative osteology which follow the description of each bone. We can heartily recommend this volume of Wood's Library to all those who do not wish to incur the expense of the larger English edition.

A Handbook of Diseases of the Eye and their Treatment.—By H. R. SWANZY, A.M., M.D., F.R.C.S.I., Surgeon to the National Eye and Ear Infirmary, Ophthalmic Surgeon to the Adelaide Hospital, Dublin, &c. With illustrations. New York: D. Appleton & Co.

The above is a handy manual, intended specially for students about to undertake the study of the eye, and it has been arranged specially with the view of being useful to them in carrying out

such studies systematically. Subjects which to beginners are found particularly embarrassing or difficult are thus given prominence, and receive careful attention. It contains the essentials without redundant matter, and seems admirably suited to the end in view.

A Manual of Organic Materia Medica.—By JOHN M. MAISCH, Ph.D. Philadelphia: Lea Brothers & Co.

This work, which has now reached a second edition, is taken up with a description of the physical properties and chemical constituents of the crude preparations of the organic materia medica. Why it should be recommended to medical students and physicians as a work they should study we are at a loss to see. Surely the day is past for burdening the student's memory with the dry, uninteresting, and, for the most part, useless details of the materia medica. As a work, however, for druggists, we should judge it to be very useful.

Books and Pamphlets Received.

THE INHALATION TREATMENT OF DISEASES OF THE ORGANS OF RESPIRATION, INCLUDING CONSUMPTION. By Arthur Hill Hassall, M.D., Lond. With numerous illustrations. London: Longmans, Green & Co.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION. Vol. II. Edited by J. Ewing Mears, M.D. Philadelphia: P. Blakiston, Son & Co.

THE PHYSICIAN HIMSELF AND WHAT HE SHOULD ADD TO HIS SCIENTIFIC REQUIREMENTS IN ORDER TO SECURE SUCCESS. By D. W. Cathell, M.D. Fourth edition. Baltimore: Cushings & Bailey.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM, ESPECIALLY IN WOMEN. By S. Weir Mitchell, M.D. Second edition, revised and enlarged. With five plates. Philadelphia: Lea Brothers & Co.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Feb. 6th, 1885.

T. G. Roddick, M.D., President, in the Chair.

Sarcomatous Disease of the Femur and Acetabulum.—Dr. Roddick exhibited the specimen and related the case. The patient, a young man, sprained his hip five years ago by falling through a trap in a hayloft. He appeared to recover completely, but in a few months became lame, and had pain, at times getting better. A year ago he had to take to crutches. Last June Dr. R. found roughness of the bones of the joint, and indistinct fluctuation in Scarpa's space. Nothing was done at that time. He was sent to the country, where he remained for two months, returning to hospital last October. The abscess was now opened. He had hectic fever and lost flesh. He went away, but returned again in January, with suppuration about the joint. Becoming worse, it was decided to amputate at the hip-joint, which was done. There was no hemorrhage of any consequence, but the patient never rallied, and died twelve hours later.

Dr. Sutherland exhibited the following specimens:—

1. *A Gall-bladder containing thirty-two stones.* This was removed from a subject (female) in the dissecting-room of McGill College. Three or four of the stones were very large, measuring an inch square.

2. *Bladder and Kidneys of a man*, from whom two months previous to death Dr. Roddick had removed a vesical polypus by median cystotomy. The bladder was much dilated and extensively hypertrophied. The ureters also were seen to be dilated. The kidneys were in a state of suppurative interstitial nephritis, or typical surgical kidneys.

3. *Malignant Disease of the Stomach, showing obstruction at the pyloric orifice.* A portion of the liver, the gall-bladder, ducts, duodenum and pancreas were also shown. Secondary deposits were seen in the latter and in the glands. The bile ducts were pervious. At the autopsy the following was noted:

Emaciation and jaundice ; 160 ounces of bile-stained fluid was removed. The liver appeared small and the stomach very large, extending seven inches below the ensiform cartilage. On raising the left lobe of the liver, a large hard mass was felt, which involved the pylorus and apparently part of the duodenum. On slitting up the stomach after its removal, the mucous membrane was seen to be pale and anæmic. At the pylorus was a thick ulcerated ring, studded with little red granular ulcerations, and occluding the entrance into the duodenum, preventing the passage of the little finger. A mass about the size of an egg was situated in the pancreas, near its head—probably a secondary deposit, as it was not actually ulcerating. Jaundice was produced by small masses in the gastro-hepatic omentum pressing on the hepatic duct.

Dr. Geo. Ross said there were several points of interest in the clinical history of this case. The gentleman came to him a year ago complaining of dyspepsia ; his general health was not good ; he said he had been failing. Improvement followed upon treatment. He saw him again in the spring, when he complained of vomiting at intervals of some length. There was no pain after meals, or ever. At intervals of one, two or three days he would have heartburn and an uneasy feeling ; he then would get over a basin and empty his stomach. He would have no nausea, or pain, or retching. On examination, the stomach was found dilated, extending below the umbilicus. Its movements were plainly visible, and splashings could be heard. The patient was anæmic, and becoming thinner. Malignant disease of the pylorus, with dilated stomach, was diagnosed. No tumor could be felt. He was advised to enter hospital in order to have the stomach regularly washed out. Coming to hospital some weeks later, no dilatation of the stomach could be made out ; it was not subsequently present. He had occasional vomiting of frothy material containing *sarcinæ ventriculi*. He became more comfortable under treatment, though he lost flesh. There was never any pain. He remained in hospital about a month. After this he gradually became jaundiced, and continued to lose weight. At no time were there symptoms of gastric trouble, except the

occasional vomiting. There never had been any hæmorrhage. A short time before death, an indistinct fulness could be made out at the pyloric end of the stomach. It proved to be scirrhus, as was shown by slides exhibited under the microscope by Dr. Johnston. Dr. Ross said the pylorus would not admit the little finger, and why there was a dilated stomach at first, and not later, was not easy to explain.

Dr. Kennedy said that perhaps the circular muscles at the pylorus, from irritation, were spasmodically contracted, but when the disease advanced they might have been destroyed, and so relieved the spasmodic closure of the orifice.

Dr. Robt. Bell (Ottawa) then read a paper by Dr. Percy W. Mathews, on "*Notes on the Diseases among the Indians of York Factory, Hudson's Bay.*" (*See March No., page* 449.)

Dr. O. C. Edwards, late secretary of this Society, and now in medical charge of Treaty No. 4 Indians, Indian Head, North-West Territory, being present, made a few remarks on some of the diseases among the five thousand Indians on his reserve. Syphilis was very prevalent, and one of the most powerful agents in weakening the Indians. Years ago they led a wandering life, had plenty of food, and were well housed in huts made of buffalo hide. Now, having entered into treaty, they are placed on reserves, making themselves practically prisoners of war. Coming in contact with the whites, they have become infected with syphilis, and as they very seldom apply for treatment, it has spread. The Indians attribute their present condition to the extermination of the buffalo. The Government has tried to make them agriculturists, with but very little success. Phthisis is a most fatal disease, and is usually accompanied with hemorrhages. They apply for assistance, but it is almost impossible to help them, owing to their being badly housed, and they will mix what one gives with their own medicines. Along with this is the noisy "tom-tom" constantly going on outside of any sick man's house or tent. Prolonged lactation is common. A squaw often nurses her child till it is three or four years old. An Indian has as many wives as he can keep, often five or six. They appear to be exempt from toothache,

They are great tea drinkers, and often mix tobacco with the tea. They smoke a great part of their time, swallowing the smoke, which they let out again by the nostrils. They never have inflammatory rheumatism. He has only seen one case of epilepsy, and that was in a half-breed. Measles comes as an epidemic, and is almost as bad as smallpox. For snow-blindness, they apply tea leaves. In the month of March, one must protect their eyes against this. Dr. Edwards said that prior to meeting with the whites, they were very moral and honest; now they don't know what these virtues are. He has visited Indians who still live by hunting, and far away, whom he found honest and moral.

Dr. Hy. Howard remarked that Butler, in his "Great Lone Land," said there was no such thing as impurity or dishonesty when he travelled among them.

Dr. Robt. Bell's experience was that the civilized are immoral. Squaws think they are benefiting their race by having a child to a white man. Labor is effected while on the knees, and is of short duration. He knew of one squaw who was drawing a load of wood, and who, after a halt of half-an-hour to have her baby, proceeded on with her load. Menstruation comes on when about 12 or 13 years old. They are not very regular, often skipping three or four months, caused by hardships and bad food. As a rule, they lose very little.

Dr. Proudfoot said he had been a good deal among the Indians up by Lake Huron, and found phthisis to be very fatal with them.

Dr. F. W. Campbell had noticed that phthisis had killed a good many of the Micmac Indians of the Bay of Chaleurs.

Dr. Trenholme said he knew of a French-Canadian woman in Montreal who was a grandmother at 25 years of age.

Stated Meeting, Feb. 20th, 1885.

T. G. Roddick, M.D., President, in the Chair.

Abnormal Muscular Slip.—Dr. Trenholme exhibited a man, aged 45, having an elevated congested-looking mark about 15 inches long, running obliquely from under the clavicle to the ensiform cartilage.

Dr. Shepherd believed it to be an abnormal muscular slip from the external oblique muscle to the pectoral.

Ulcer of the Stomach; adhesion to the liver; abscess between.—Dr. Bell exhibited the specimen and Dr. Roddick related the following history of the case: Mrs. J. sent for him three years ago for a profuse hemorrhage from the stomach. Ulcer was then diagnosed. One year later she had a second bad hemorrhage. A few months after recovery from this last attack she broke her radius, which united well. After a time she failed in health, became blanched, and felt as if she lost blood, though no more ever came by the mouth. On being sent for again, Dr. R. P. Howard was asked to see her in consultation. At this examination, they found the stomach dilated. Dr. Howard concurred in the diagnosis of ulcer of the stomach. The patient would eat, and, after a day or two, would vomit apparently all the food taken the couple of days previous. Washing out the stomach was suggested, and the case was handed over to Dr. Bell to carry this treatment out. Dr. Bell said that for a time his patient stood the treatment, but afterward she declined to have anything further done. She only lived six weeks longer. He got permission from her friends to allow him him to go to the vault and open her to examine the stomach. On the posterior wall of the stomach, midway between the œsophageal and pyloric openings, is an old ulcer; at this point the stomach is also adherent to the liver, and between the two is a sac containing pus, with an opening into the stomach.

In answer to questions, Dr. Roddick said the stools never showed signs of blood. He fed her at one time for a month per rectum on peptonized foods.

The Single Suture.—Dr. Alloway gave the following particulars:—Of the last thirty cases of parturition I have attended in primiparæ, eight have suffered from laceration of the perineal body sufficiently extensive to warrant the application of the *single suture.* In one of these cases, the suture was not applied until six hours had elapsed since the delivery. Union in all of these cases has been complete and permanent. In all of them I have employed the most perfect antiseptic course of post-partum treat-

ment, to which I attribnte a large share of the success in obtaining primary union. The application of the single suture was suggested and practised by me two years ago for the first time. In the *American Obstetrical Journal* of February, 1884, I have given a detailed description of the operation, a short epitomé of which is all that is necessary here. A straight perineal needle three inches long should be used. I have had these needles for this operation made by Messrs. Codman & Shurtliff of Boston, and they can be obtained at Messrs. Lyman & Sons, Montreal. No other needle can be used with the same satisfaction. I use, absolutely, Snowdon's iron-dyed silk, No. 13. A strong needle holder completes the outfit necessary. During the examination of the wound, sponge it well of all blood-clots with a solution of bichloride. Then pass the needle through the skin about half an inch from the edge, and at a level with the very beginning of the tear. With two fingers of left hand in the rectum, force up the recto-vaginal cellular tissue and make the needle glide rapidly, though steadily, beneath this cellular tissue, as close to the wall of the rectum as possible to make its exit at a corresponding point on the opposite side of the tear. Now sponge the wound carefully again, and bring the edges of the wound together by tying the suture fairly tight. It will be noticed now that there will be some bulging or gaping of the part of the wound between the suture and sphincter ani, and will be very tempting to apply another superficial suture ; but my advice is—*don't*, it will be frustrating the very object of the operation,—avoid all *unnecessary* sutures as you would other foreign bodies between the edges of the affixed surfaces. This gaping fissure will shrink away by the third day, and the two edges will come together in close union. I will now speak of one or two cardinal points which are *absolutely* necessary in doing this operation. First, Be sure that the needle, in no part of its course, appears in the vaginal wound. The corners of the laceration at the entrance and exit of the needle, where the wound is sometimes deeply fissured and jagged, require especial care on this point. To guard against this, the thumb of the left hand should be kept always in the wound over the course of

the needle, constantly feeling for it; and should you detect the needle in the surface of the wound in ever so small a part of its course, it should be withdrawn and deeper tissue taken up. After the needle has made its exit on the right side, it should not be completely drawn through until the operator has again examined its track and become satisfied that the suture will be completely buried in all its course. If this care is not specially taken, and a part of the suture should gain entrance to the wound, a pus pocket will be very likely to form, and the operation will fail. A suture passing through the cavity of a wound is a foreign body, but passing around outside of the wound, it cannot interfere with union. The certainty of success of this operation hinges largely on this simple fact, and it should be well borne in mind. The suture is removed on the eighth day by dividing it with a scissors, and it will be found to give a loop of about three-quarters to one inch in length if the divided ends are reunited. The second point of importance lies in the after antiseptic treatment; and I will certainly not hold the principle of the operation responsible for failure unless this point is carried out as advised. I hold this position on the same grounds as a surgeon of the present day who would not feel inclined to hold himself responsible for the successful issue of an amputation or severe lacerated wound, the after-treatment of which had been taken out of his hands and handed over to the tender mercies of an ignorant nurse and a few well economized soiled rags. I cannot conceive why there is so much opposition to the dressing of puerperal wounds.

The main part of the post-partum antiseptic treatment consists in irrigating the wounded passage with a $\frac{1}{2000}$ mercuric solution *once* daily. The first irrigation is performed the day following the delivery, and again at each morning visit until the eighth day, when the suture is removed and union found complete. In carrying out this procedure, the patient is gently lifted, while lying on her left side, to the edge of the bed, the nates hanging just over the bedboard. A small rubber apron (a quarter of a yard square) is slipped under the hips and tied over the crest of the ilium. In this way a gutter is formed which carries the

fluid as it runs from the vaginal passage into a receiving basin on the floor. The reservoir of the irrigator is then filled with the mercuric solution previously prepared. The nurse holds the reservoir in her hand at the proper level, and the physician introduces the glass tube into the vagina after he has first allowed some fluid to run into the basin to drive out the air. As soon as the nurse notices that the fluid has become exhausted to about an inch from the bottom of the reservoir, she informs the physician, and he withdraws the glass tube from the vagina and allows the remaining fluid to run on and cleanse the external parts. A napkin is then applied, and the patient gently lifted back in the bed and allowed to remain on her back for a short time. I never allow the nurse to touch the parts under any pretence whatever. Her duty consists in giving the patient her prescribed diet and attending to the infant. A saline is administered every morning, and the bowels gently moved over a bedpan adjusted by the patient herself.

I will now illustrate by these diagrams on the board that directly after a bad laceration takes place, and before the suture is passed, the vaginal passage is much elongated and the uterus slightly anteflexed. The uterus can now hardly be reached by the fingers without introducing the whole hand. We will now pass the sutures and draw somewhat upon the posterior wall, through which it passes, and you will find that the vagina shortens, the uterus comes nearer to the introitus, and as the cervix is drawn slightly forward, the fundus leans backwards. Draw the suture still more and fix it with a firm knot, and on now passing your index finger you will easily meet the cervix at its tip, and the fundus will have been thrown still a little further backward into what we would call a normal position. This series of facts I have demonstrated to myself on the living subject, and it serves to establish the ease with which a uterus may become prolapsed and afterwards retroverted, as it sinks in the pelvis where the perineum and vaginal wall have not been repaired, and the patient soon assumes the erect posture. I will now, by this wooden model, show how the suture is passed, and illustrate that it thoroughly controls the muscles in the

perineum (the transversus perinei, bulbo-cavernosus, &c.) which exert any traction power on the laceration. This is independent altogether of the fact that as the child becomes evolved, dilatation is so extreme that there is such calibre to spare between this extreme dilatation and complete involution, that there can be practically no side traction upon the wound till the eighth or tenth day, when union will have become fairly strong. So that really all we want are two fixed points—one at each extremity of the wound—and that the cavity of the wound be cut completely off from the vagina (the drain-pipe to the uterus). Draw the suture tight and tie the vent, pass your forefinger down along the posterior wall of the vagina, and you will find no wound, not even a fissure. The whole laceration is compressed like the mouth of a bag by a running string. The wound below is a *cul-de-sac.* The sides are in perfect contact, and as no discharges from the vagina can possibly enter it, primary union must ensue.

Dr. Kennedy said slight tears were very common, and seldom could be avoided. These tears appear more at the time, and almost always do well without interference. In an instrumental case, there is much less danger of a bad tear if the forceps be removed when the head is well down against the perineum, allowing the natural efforts to complete delivery. He advocated stitching if there be much of a tear. Unless there were special danger of septic poisoning, he would not use injections.

Dr. Blackader dissented from Dr. Kennedy in leaving even a very moderate tear alone. He always mends such a rent for two reasons. It lessens the chance to prolapse, and it closes an open wound, thereby guarding against septic infection. Heretofore he has put in two or three stitches; lately he has tried the single stitch, as employed by Dr. Alloway, and with good results.

Dr. Trenholme believed a common darning needle would answer in this operation. He said that after a day or so the stitch got loose from the tissues being swollen when applied; to obviate this, Dr. Carson of Detroit employed the shotted suture —that is, a wire suture held on each side of the rent by a small

bullet which could be pushed up the wire when it became loose. He (Dr. T.) uses the catgut sutures, and gets perfect satisfaction. He thought Dr. Alloway's purse-string suture would shorten the posterior wall of the vagina, and so favor prolapse and retroversion.

Dr. Roddick said that Dr. Alloway's operation had this in its favor—it was easily done. He believed it to be an admirable method.

Dr. Gardner had not yet tried the single stitch. He employs two or three stitches of silk. He intended trying the single ligature.

Dr. Alloway, in reply, said that Dr. Kennedy's cases, where left alone, had to heal by granulation, not by first intention, as is the case when stitched properly. In reply to Dr. Trenholme, he said that a common darning needle would be very apt to break in the forceps. As to Dr. Carson's shotted suture, he thought it very objectionable to be interfering with the wound every day. Catgut sutures are difficult to tie, and they may become absorbed too soon.

Dr. Kennedy asked what length of tear Dr. Alloway would consider necessary to stitch.

Dr. Alloway said anything over a quarter of an inch.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

Malignant Endocarditis.—The following is an abstract of the first of the Gulstonian lectures on "Malignant Endocarditis," delivered by Prof. Osler. One of the first points to settle is the nomenclature. "In discussing the subject of endocarditis we are met at the outset by difficulties of nomenclature and classification. The designation *acute* may be used to indicate those forms which are accompanied by proliferation of, and exudation upon, the endocardial surface, with or without loss of substance, as opposed to *chronic*, in which there are sclerotic changes without vegetations. Subdivisions of the acute form have been arranged on an anatomical basis as the

terms *plastic*, *papillary*, *verrucose*, *fungous*, *ulcerative*, indicate. On the other hand, from an etiological point of view, the forms of endocarditis are as numerous as the diseases in which it occurs, and we constantly hear the expressions *puerperal*, *rheumatic*, *scarlatinal*, etc. Some speak of primary and secondary forms, while from a clinical standpoint they are arranged in two classes—simple and grave. Anatomically, there appear to be no very essential differences in the various forms of acute endocarditis. Between the small papillary excrescence and the huge fungating vegetation with destructive changes all gradations can be traced, and the last may be the direct outcome of the first; the two extremes indeed may be present in the same valve. They represent different degrees of intensity of one and the same process. A classification of cases based on the ordinary macroscopic characters of the inflammatory products into warty or verrucose and ulcerative will in many instances group together cases widely different in their clinical aspects, and, contrariwise, a clinical subdivision into cases of simple and cases of malignant endocarditis by no means of necessity implies that the lesions in the former case are all of the plastic or warty variety, and in the latter of the ulcerative or destructive. The term *ulcerative* has come into very general use to describe the grave form, and it expresses well an anatomical feature present in a large proportion of cases; but in others it is very inapplicable, as there may be no actual loss of substance, and no more destruction than occurs in the verrucose form; and, on the other hand, there may be great destruction and ulceration from causes of an entirely different nature. The numerous other terms employed, *septic*, *infectious*, *diphtheritic*, *mycosis endocardii*, *arterial pyæmia*, while each expressing some special feature, and so far suitable, have never come into very general use. On the whole, it seems to me that the names *simple* and *malignant*, which we use so often to separate the milder and severe forms of many diseases, might appropriately be employed in describing the cases of acute endocarditis; the *simple* being those with few or slight symptoms, and which run a favourable course; the *malignant* the cases with severe constitutional dis-

turbances and extensive valve lesions, whether ulcerative or vegetative, the term being more clinical than anatomical. The lesions of malignant endocarditis are by no means uniform, and may be vegetative, ulcerative or suppurative; and these various forms may occur alone or in combination. The belief that there is always ulceration has led to some confusion; and we must recognise that there are cases with the clinical history of the malignant form in which, post mortem, the valvular condition has been that of a severe vegetative or verrucose endocarditis. More commonly with or without vegetations there is ulceration, the frequency of the occurrence of which has given the name most often attached to this form of endocarditis. The loss of substance may be superficial, involving only the endocardium, or it may be deep and destructive, leading to perforation of a valve, of the septum, or of the heart itself. On the valves extensive outgrowths usually accompany the process, and may conceal the ulcer or project as fungating masses from its edge, as is well illustrated by this coloured drawing. In many instances the process appears simply ulcerative, without any vegetations to speak of. In the slightest form only a superficial abrasion exists, perhaps scarcely recognisable, in others a process of erosion may go on by which half a valve may be destroyed, or there may be (as shown in this drawing) a deep excavation extending beyond the valves and destroying the muscle substance of the heart, leading to perforation of the septum or of the wall of the ventricle. These are well-known features, however, upon which I need not dwell. In two instances I have seen superficial necrotic changes without ulceration or vegetation, circumscribed patches, the size of a sixpence, opaque yellow-white in colour, resembling the necrotic pleura over a pyæmic infarct of the lung or portion of dead peritoneum at the base of a deep typhoid ulcer. Doubtless these would in time have formed ulcers. I find this condition noted by one or two observers. Lastly, the process may be suppurative, in which case the deeper tissues of the valve appear first involved and the endocardium only implicated by contiguity. The occurrence of small abscesses at the base of extensive vegeta-

tions is not uncommon, but there are also instances in which the suppuration seems the initial step. The combination of ulcerative and fungating outgrowths is perhaps the most common condition."

The variations in the anatomical characters of the vegetations are then described, showing how fibroid and calcareous changes are likely to take place in them. A word of caution is given not to mistake for the special changes under consideration either spots of atheromatous degeneration or altered and adherent blood-coagula. The histological character of endocardial outgrowths is minutely traced, and special attention is drawn to the occurrence of an abundance of the so-called Schultze's granular masses in the fibrinous layer which covers the warty growth proper. "The larger vegetations, more characteristic of malignant endocarditis, consist of a granular material composed of altered and dead tissue elements, fibrinous exudation, and colonies of micrococci; the deeper parts present the appearance of a granulation tissue, while at the attachment in the valve there is always more or less infiltration and increase of the cell elements. The granular substance is structureless, and resembles diphtheritic exudation, the resemblance at times being so close that one can readily understand the application of the term 'diphtheritic' to the inflammation. It may be distinctly laminated, and with a high power fine filaments can be seen, though usually the granules conceal all appearance of structure. Strands of translucent material may occur throughout the mass, as if portions had undergone a sort of hyaline transformation. In some instances this is very marked. Pale spheres filled with granules also occur, and may be very abundant. They have been described as colonies of micrococci, but some regard them as altered endothelial elements. I have seen them too numerous to be explained on this view. At the attachment of the vegetation there is a zone of tissue deeply infiltrated with leucocytes, and deeper still the tissue elements of the valve present an increase of nuclei and cells. The destruction of tissue appears to result in two ways: first, a gradual extension inwards of the necrotic process, doubtless induced by the

micrococci; secondly, the softening and separation of valve tissue caused by the rapid development of leucocytes at the base of the vegetation. The micrococci are constant elements in the vegetations. All granules of a uniform size met with in the sections are not micro-organisms, nor, indeed, are all which stain by some methods recommended for the detection of these bodies. By far the most satisfactory method is that of Gramm, in which the section, after staining in gentian violet, is transferred for a few minutes to a dilute solution of iodine and iodide of potassium, and then to the alcohol, when it is found that the colour has been extracted from all tissue elements and nuclei, leaving only the micro-organisms stained. They vary a good deal in number and arrangement, and may be scattered singly in the granular substance or arranged in groups. They are usually very numerous at the deeper part of the vegetations, just where the structureless material joins the granulated tissue, and they may penetrate deeply into the substance of the valve. Sometimes the smaller vegetations seem made up exclusively of them. Several of my specimens appear to confirm the view of Klebs, that the micrococci lodge first on the endocardium and penetrate into the substance, often as distinct columns. In their immediate vicinity there is a zone of necrosis, and beyond this an accumulation of leucocytes and signs of reactive inflammation. The micro-organisms found in connexion with the malignant endocarditis are not all of the same kind. Klebs distinguishes two forms—one met with in septic and the other in rheumatic cases. In some instances the micrococci are all arranged in zoogloea-like masses; in others, particularly the septic cases, they are in chaplets. Some present distinct capsules. Small elongated bacilli have also been found; I have seen them in one instance—short, stout rods often joined in pairs. Delafield and Prudden have recently noted the presence of bacilli in the vegetations of a very acute case of malignant endocarditis. Cornil, in a recent lecture, stated that the bacillus tuberculosis had been found in the vegetation on the valves in cases of phthisis, and expressed the opinion that before long we should have accurate knowledge of a variety of

micro-organisms in endocarditis depending upon the nature of the primary disease. By culture experiments alone can we hope to have the question settled.

"The local effects of the ulcerative changes are important. Perforation of a valve segment is extremely common, sometimes there is a clean-cut punched-out hole with scarcely any irregularity of the edges; more frequently, however, there are great fungous vegetations which completely close and conceal the perforation. Erosion of the chordæ tendineæ is frequently met with, and an entire group passing to the papilla may be destroyed, the ends curled and encrusted with vegetations. Ulceration of the heart muscle leading to perforation of the septum or of the wall of a chamber is a much less frequent occurrence. I have collected notes of eleven instances; three of the septum close to the aortic ring. Ulcers at the aortic ring perforated the left auricle in three instances, the right auricle in one and the right ventricle in one. In a remarkable case of Dr. S. Mackenzie, the left ventricle was perforated by an ulcer at the apex. In a case of Dr. Curnow the ulceration extended between the coats of the aorta, and then perforated into the lumen of the vessel; and in one of the Montreal cases there was perforation of an aneurysm of the aorta by ulceration, an instance of extensive ulcerative endarteritis with the production of multiple aneurysms. Another common result of ulceration is the production of valvular aneurysm. The anterior flap of the mitral is most frequently affected, and then the aortic cusps. In the records of the cases which I have reviewed I was surprised not to find this condition noted oftener, only in about 12 per cent. of the cases; but in very many cases the record of the anatomical condition was meagre. It was Sir James Paget, I think, who first referred to the frequency with which sclerotic and malformed valves are attacked by acute disease. Chronic valvulitis is met with in a large number of cases of malignant endocarditis. The records which I have examined give only a percentage of about twenty-five, but the condition of the valves, except as regards ulceration, was often omitted, and this represents a very much smaller percentage than actually occurs. In more

than three-fourths of the Montreal cases sclerotic changes were present, and Dr. Goodhart found in a series of sixty-nine cases that sixty-one presented old thickening of the valves. In very many of the cases the condition of fusion of two of the aortic cusps was present. This abnormality is almost invariably accompanied by sclerotic changes, and to the existence of these is probably due the frequency with which they are attacked by ulceration. In seventeen instances of fusion of two of the aortic cusps of which I have notes there were ulcerative changes in eight, in two or three of an atheromatous nature.

" The cases may be divided into those without any embolic processes, cases in which the infarcts are simple, not suppurative, those in which there are innumerable suppurative infarcts, and cases in which some of the infarcts are simple and some suppurative. It is remarkable how variable these embolic features are. They may be entirely absent in well-marked malignant cases. They are not necessarily associated with suppuration ; indeed, in a very considerable number of cases they present the characters of ordinary hæmorrhagic infarcts, but in the traumatic and puerperal cases the infarcts are invariably septic. They may be few in number, only one or two perhaps in the spleen or kidney, or they may be in thousands throughout the various organs of the body. When suppurative, micrococci, in my experience, are always present ; but the micrococci may exist in the vessels without inducing this change. In severe forms of the disease hæmorrhages are very frequent upon the skin, serous and mucous surfaces. The cutaneous ones will be referred to again in connexion with the symptomatology. They appear, in many instances, to be due to the effect of the poison, just as in other infectious diseases ; in others they are undoubtedly embolic, and a minute necrotic or suppurative centre can sometimes be seen. In the membranes of the brain I have twice met with extensive superficial extravasation. Litten has called attention to the frequency of retinal hæmorrhages, particularly in the endocarditis of puerperal sepsis. In some instances, there are innumerable miliary abscesses, more particularly in the heart and kidneys. They are often associated

with hæmorrhage, and the smaller ones look like little extravasations, but the presence of micrococci and suppuration can be easily determined in stained sections. The spleen is most often the seat of infarction, and next in order the kidneys. The lungs are usually affected when the endocarditis is on the right side, and there may be suppuration or even extensive gangrene, but even with destructive lesions of the pulmonary valves there may be no suppurative infarcts in the lungs, as in a case of Dr. Church. Or again, as in a case of Dr. Moxon's, there may be with aortic valvulitis suppurative infarcts in the lungs, and simple ones in the other organs. The gastro-intestinal canal may present very remarkable changes, due to the presence of numerous infarctions, from the size of a pin's head to a split pea. They are slightly elevated, greyish-yellow in colour, often surrounded by a zone of deep congestion or extravasation, and on section may show a suppurative centre. Micrococci are present as in other miliary abscesses, and in several instances I was able to find small embolic plugs in the arteries of the submucosa. The abscesses may discharge and leave a small ulcerated surface. In the stomach there may be similar minute infarcts, and occasionally larger ones. Carrington has described a remarkable case in which there was a gastric ulcer, apparently due to embolic process, in a case of severe endocarditis; and Magill, a case in which the stomach was intensely inflamed, the mucous membrane at the greater curvature being black, almost gangrenous. The liver may present minute abscesses, and in a number of cases in which there has been jaundice degeneration of the cells has been observed. The serous surfaces are often inflamed, pleurisy and pericarditis being not uncommon complications. The pericardium is most frequently affected in rheumatic cases in which endocarditis and pericarditis may occur simultaneously. Pleurisy is met with chiefly in connexion with the traumatic and puerperal cases, and also with pneumonia, which, as I shall show, plays such an important part in the history of this form of endocarditis. The cerebral lesions are of the substance and of the membranes. Embolic softening, simple or suppurative, is ex-

tremely common, and in very many cases head symptoms supervene and there is paralysis of one side or the other. There may be a single embolus, producing extensive suppuration or red softening, or there may be multiple infarcts in various regions. The meningeal complications of endocarditis have not received much attention. Considering the frequency with which it has occurred in the Montreal cases, five instances out of twenty-three, I was quite prepared to find such a large number as twenty-five cases—*i.e.*, in somewhat over 12 p. ct. In the majority of these cases it occurred in connexion with pneumonia. It is almost always cortical, but many extend to the base and involve the nerves, leading in one case, which I saw with Dr. Ross at the Montreal Hospital, to strabismus, and also to ulceration of the cornea from involvement of the fifth nerve. In rare instances the spinal meninges are involved, and the clinical picture may be that of an acute cerebro-spinal meningitis. Acute suppurative parotitis was noted in three cases."

Malignant Disease of the Kidney, with Autopsy.—The specimen under consideration was removed from a man æt. 60, an inmate of the Philadelphia Hospital. The first symptom of his malady was noticed about six weeks before death. When admitted to my wards he complained of passing pure blood from the penis, otherwise the urine was physiological. He never suffered the least pain ; no dullness could be detected in the lumbar region or in the right flank. There was moderate cachexia, indicating the possibility of malignant disease, but little loss of flesh. The hæmaturia continued uninterruptedly until death, prior to which malignant disease was confidently anticipated. The right kidney was found to be enlarged, weighing twelve ounces—about one-half its bulk was filled with malignant new formation situated on the anterior portion of the organ. Microscopic examination by the microscopist of the hospital determined it to be an alveolar sarcoma. The tumor was rich in blood-channels, and part of the bulk of the tumor was entirely made up of clotted blood in a semi-organized condition. According to Zenker, Schroeder

and others, tumors of the kidney frequently do not arise from the epithelial tissues of that organ. The connective-tissue origin and character of these growths, and their richness in blood-vessels, would assign many so-called carcinomata of the kidney to the group of sarcomata.

The prominent symptom during life was hæmaturia, yet in similar cases the condition of the urine is frequently absolutely negative. Ebstein (Ziemssen Cycl.) states that hæmaturia occurred only twenty-four times in fifty cases. Again, authorities unite that long intervals may elapse between the periods of hæmorhage. We can easily understand this since the cavities of the tumor which contain the blood may not communicate with the collecting tubules even in cases of extensive disease, or secretion of urine may be vicariously assumed by the other kidney. I have even met with cases of abscess of the kidney with only an intermittent discharge of pus. We may assume, however, that causeless and painless hæmorrhage from the genito-urinary tract is a very suspicious symptom, indicating malignant disease. Paroxysms of pain may attend the passage of clots of blood through the ureter; quite resembling those of renal calculus. The rule ordinarily given in hæmaturia is, that blood escaping from the neck of the bladder or urethra precedes the stream of urine, and whenever the blood has accumulated in the bladder in considerable quantity blood-clots will be passed, but the urine first voided will be clear. In the case reported in this paper, pure blood was frequently passed almost unmixed with urine, so that the previously stated rules differentiating the cause of hæmaturia are of relative importance. Paroxysmal hæmaturia can be recognized not only by its intermittent character, but by the abundance of the blood-pigment, combined with the rarity of blood corpuscles. The color of the urine in this affection is said to be due to hæmoglobin. The hæmaturia of renal calculus can be recognized by exclusion only, unless renal colic with unilateral localized pain, or some characteristic sediment, be present; the total amount of urine may be diminished very decidedly, but not otherwise altered. Statements have been made by Heller, Moore and others that

discharges of " flocculi of cancer tissue " may be found in the urine in this class of cases. The altered epithelium of the renal pelvis and ureters has, doubtless, been mistaken for cancer cells, because although certain combinations of cellular material may excite suspicion in connection with other symptoms, nothing definite can be asserted from an examination of the urine. Recently Dr. Julius Wolf (*Deut. Med. Wochenschaft*, Sept. 25,) has stated that iodide of potassium is much less readily eliminated by the kidney during Bright's disease than in health, and recommends the use of four or five grains daily for diagnostic purposes. Some observations by a student of the University of Pennsylvania, Mr. Gregory Guiteras, have confirmed the view—the iodine being absent in the urine in cases of disease of the kidney, but was present in abundance in the saliva. At first sight the test might appear of service in malignant renal disease—but since malignant disease is usually a unilateral process, the test might indicate bilateral disease.

Primary malignant disease of the kidney is not always recognizable by percussion, as was illustrated by the present specimen. The bulk of the growth often projects anteriorly, since the lumbar tissues offer greater resistance. Careful percussion should be made over the lumbar and also the lateral regions; in the latter, percussion should include the space between the lower ribs and the crest of the ileum upward, or forward towards the navel. When tumors of the kidney are very large, and especially when the disease has involved adjacent viscera, the formation may become recognizable anteriorly by palpation, as well as percussion. These growths are usually adherent to the walls of the abdomen or surrounding parts, and thus become immovable. They may be round and smooth, or nodular and lobulated, frequently giving rise to a sense of fluctuation, or elasticity, on palpitation. They are, therefore, liable to be mistaken for hydatid tumors, and may be confounded with tumors of the liver. In case the growth is situated on the right side, the mistake is particularly possible, but the tumor will not rise or fall with the movements of the diaphragm, and the fingers of the hand can usually be introduced under the

ribs on the right side. These growths, when fluctuating, may indicate puncture with an aspirator as a deciding diagnostic measure, which has been practised. In one recorded case a whitish-red mass of tissue was obtained, in which the microscope showed a delicate connective-tissue stroma, in which innumerable nuclei were imbedded, and the operation was followed by no bad results.

In renal tumors pain is a pressure symptom, and therefore may be present or absent in accordance with the size and situation of the growth. In malignant disease of the kidney, the cachexia usually noticed in such cases is a late symptom, and in cases of sarcomatous disease is never prominent. Malignant disease of the kidney is more frequent in the early and late periods of life, and is rare as a primary disease, but when present, the other kidney is usually unaffected, and it is very seldom accompanied by malignant disease of the lower urinary passages, whereas malignant disease of the testicle is often followed by renal carcinoma.—*Ewd. T. Bruen, in Maryland Med. Jour.*

The Treatment of Scarlet Fever by Scalded Oatmeal.—As is very well known, the process of desquamation which follows scarlet fever varies very much in different individuals; sometimes it is accomplished by particles so fine as to be hardly perceptible, and these are a very frequent and certain source of contagion by means of clothes and otherwise, much more so than the scales as ordinarily thrown off. It is evident that this being the fact, it must be much more difficult to prevent contact and consequent contagion with these fine, almost imperceptible scales which are floating in the atmosphere, than where desquamation occurs in large patches of skin. To obviate this danger, Mr. George Smith, of Somerset, England (*Bristol Medico-Chirurgical Journal*, December, 1884), states that he has for several years been in the habit of having his patients well sponged over the surface of their bodies, commencing, as a rule, about a week after the appearance of the eruption, and continuing the process until desquamation is complete, with a mixture of one ounce of oatmeal to a pint of boiling water. The solution to be

made fresh every day, and used tepid, or at such a temperature as may be comfortably borne by the back of a finger. His reason for using this particular combination is that the gluten in it sticks the scales to each other and to the surface of the body, thus allowing of their being removed from one sponging to another without the ordinary risk of infecting either atmosphere or clothes, and thus greatly lessening the risk of spreading the disease. Secondly, the gluten fills up the cracks of the new skin and protects it from cold, as patch after patch of it becomes bare, and it thus, to say the least, greatly lessens the risk of the dropsy which so often follows upon this disease.—*Therapeutic Gazette.*

On the Duration of Contagiousness after Acute Infectious Diseases.—By Alfred Ludlow Carroll, M.D.—The only attempt within my knowledge to formulate experience in respect of the duration of infectiousness is that of Dr. Miller, of Dundee, whose tabulation is as follows:

Small-pox	14 days after termination of scabbing.
Typhus	28 days from inception.
Scarlet fever	7 weeks from inception.
Diphtheria	6 weeks from inception.
Whooping-cough	8 weeks from inception.
Measles	6 weeks from inception.

Small-pox.—As to small-pox, there is pratically unanimity in regarding the danger as existing until all crusts are removed; but a few incline to prolong even further the period of isolation.

Typhus Fever.—In relation to typhus, there is less accord. One deems fomites the most important factor in the dissemination of the malady, while the rest lay stress on personal contagion. One regards it as "not contagious after a short interval;" a second advises segregation until repeated baths have followed the complete disappearance of the cutaneous exanthem; a third, somewhat indefinitely, would permit return to school "after complete recovery and disinfection."

Typhoid Fever.—Those who believe in the direct personal contagiousness of enteric fever are few in number, and I fancy that nearly all of us will agree that the intestinal discharges are

all with which preventive medicine has concern. Whether these retain their infectious properties during the whole process of the malady is a question still in uncertainty, and rendered more obscure by the apparent demonstration that the disorder may, under certain undetermined circumstances, be generated *de novo* from ordinary sources of filth-poisoning. At all events, isolation of the person seems unnecessary as soon as the convalescence is complete.

The same considerations will apply, I believe to cholera, with the further remark that, if Koch's recent observations are correct, the germs of this disease appear to be shorter-lived than any other known species, being destroyed, not only by desiccation, but by the "scavenger-bacteria," which conquer them in the struggle for existence in the products of common decomposition.

Diphtheria.—Diphtheria affords a wider debatable ground. To begin with, there are many, (among whom my own experience forces me to class myself) who assign the first place in the pathogeny of diphtheria to the filth-poisoning, and doubt its exceeding contagiousness. Of a number of persons exposed to the same pathogenic conditions, it is not surprising that several should succumb; but this is not convincing evidence of transmission from one to the other, and I have seen repeated instances where, despite intimate contact, the disease failed to extend after its introduction into places in proper sanitary condition. One of my correspondents, who has long had charge of a large hospital for children, believes this malady to be "feebly, if at all, contagious," and finds it quite safe to remit quarantine "after the disappearance of membranes;" a practical sanitarian, of national reputation, excluding fomites and filth in air or water, does not believe in personal contagion; a distinguished teacher in one of our metropolitan colleges doubts "its communicability, except by contact;" another, equally eminent, declares that contagiousness endures until the last trace of inflammation or infiltration secondary to the diphtheric process has disappeared; a fourth would protract the duration of quarantine for a month, or, at least, three weeks,

after all symptoms have abated, and would forbid return to school while any redness of the fauces or any coryza lingers. The discrepancy of opinion in this respect among the leaders of professional thought suffices to show the need of more definite data to guide our deliberations.

Whooping-Cough.—In pertussis, all opinions agree, save one, that contagiousness ends when the cough loses its spasmodic character, the single doubtful view being that, as the danger is wholly from the breath of the patient, it can not be determined how long the cough may convey infection. It should be remembered, however, that a few writers have expressed doubts of the contagiousness of pertussis in any stage.

Measles.—With regard to measles I find equal diversity of views. One regards its contagium as very volatile, not long adhering to person or clothing, and permits the return of the patient to school two weeks after convalescence; a second would defer liberation from quarantine until a week, at least, after desquamation; a third releases the patient when desquamation has ceased, or, in cases where no desquamation occurs, after twenty-one days; a fourth fixes eighteen days; a fifth believes the danger past when the febrile stage and eruption are gone. The majority measure the time of isolation by the process of epidermal exfoliation.

Scarlatina.—In scarlatina, also, we have opposing opinions, ranging from that which considers it as a pythogenic disease, slightly, if at all, contagious from the person, to that which holds the infection to be communicable by the pulmonary exhalations, the blood, the naso-pharyngeal secretions, even the urine, as well as by the epithelial scales. One of my correspondents thinks the infection remains so long attached to the person that quarantine should endure for eight weeks; another cites an example of transmission after six weeks of isolation followed by a change of clothing; the rest concur in releasing the patient after desquamation has ceased and the surface been thoroughly cleansed. Most of us, I dare say, have adopted this "rule of thumb."—*N. Y. Med. Jour.*

Intubation of the Larynx.—In the New York *Medical Record*, of February 21, Dr. E. F. Brush thus describes a case of intubation of the larynx by Dr. O'Dwyer, which he witnessed at the New York Foundling Asylum, in a child three and a half years old suffering from pneumonia and inflammatory croup :—" The boy was placed in the nurse's lap, an assistant held the head ; a gag was put into his mouth. Dr. O'Dwyer passed the index finger of his left hand back into the child's pharynx, while his right held an instrument shaped like a small steel sound of the Van Buren pattern, on its distal end a gold-plated oval tube four-sixteenths of an inch in its long diameter and two-sixteenths in its shorter diameter, and one and a half inches in length, collared around the upper extremity except at the anterior curve of the oval. In this uncollared portion was a small eyelet armed with a long silk thread. This tube was carried along the doctor's finger into the pharynx. There was a spasmodic coughing, a reddening of the face, the sound-like instrument was immediately withdrawn without the tube, the boy gave a long, deep inspiration, the thread was quickly withdrawn, and a marvelous change was instantly produced in the patient's whole condition. The intense redness caused by the first irritation gradually faded, a copious perspiration broke out over the forehead, the respirations became easy and quiet. I actually thought the child was dead, as the eyes were fixed in a stare of astonishment, and before the little sufferer had recovered from his amazement, he was sleeping soundly." Having mentioned other similar cases which he saw at the Foundling Asylum, Dr. Brush gives a sketch of the history of intubation of the larynx, and concludes that Dr. O'Dwyer's procedure is not a revival of the old methods. From his own observation of the cases seen by him he states that he is fully convinced that intubation of the larynx is a more simple operation than that of tracheotomy ; that the laryngeal tube is worn with greater ease to the patient ; that the air which reaches the lungs is heated and moist, which is not the case with the tracheal tube ; that coughing and expectoration are carried on with greater ease and more effectually than is possible with the

tracheal tube, and that the absolute care and vigilant watching, which form such an element of strength in tracheotomy, are not called for in Dr. O'Dwyer's method of procedure. He adds that the most striking feature in this method, and one which must be of the greatest comfort to the physician and to the parents, is the entire absence of mutilation or disfigurement. In the laryngeal diseases of infancy, which so often prove fatal under the very best conditions, parents and friends not infrequently imagine that it was the operation of tracheotomy that was the cause of death. The unsightliness of a dry, cracked mouth; the repulsive spectacle of a tube protruding from the trachea, often lined with, and having hanging from its orifice, expectorant matter; the necessity of informing the parents of the hopelessness of their child's recovery, and of requesting their consent to a desperate surgical operation as a kind of forlorn hope—all these painful elements are spared in the method adopted by Dr. O'Dwyer.

Palatable Prescribing.—Cough mixtures can be to a certain extent rendered palatable by a selection of proper vehicles. The citrate of potassium can be largely masked by the free use of lemon juice. Muriate of ammonia is largely covered by liquorice, provided the latter be added in such quantity that there will be ten to fifteen grains of it for every ten grains of the muriate. The addition of glycerine to a mixture containing an ammoniacal or other irritant salt, often has the most happy effect in obtunding the acridity. It must not be forgotten, however, that glycerine throws out of solution most alkaloidal salts. This is essentially important in connection with the fact that the addition of glycerine to the tincture of the chloride of iron is most advantageous from the æsthetic point of view. We are very apt to combine tincture of chloride of iron with salts of quinine, strychnine, or other alkaloids. Even when such solution is very strongly acid, glycerine precipitates the organic principle. Syrup of squills, syrup of ipecac, and most other sweet expectorants, can readily be masked by the syrup of wild cherry bark, provided cyanide of

potassium (at least 1-20th of a grain to a dose) be added to intensify the prussic acid taste. The excessive sweetness of these mixtures is disagreeable to some individuals; this, of course, can readily be obviated by the addition of lemon juice or other acid. There are certain very valuable remedies whose nauseousness in solution cannot be overcome by any combination. Under these circumstances the endeavor of the practitioner should be to give a dose so small and in such form that it can be enveloped in a mechanical coating of some sort. Whenever the material is a solid, this is readily managed by giving it in the form of a silver-, gelatin-, or sugar-coated pill; for, whatever may be said in regard to the solubility of these preparations, they are dissolved in the stomach with sufficient rapidity for all practical purposes, provided the pharmacist has done his work properly and the pills are at all fresh. It seems to be a tradition of the profession, that all cough remedies should be given in liquid form. We hear continually of cough mixtures, but who ever heard of a cough pill? Now, there is little reason in this. Squill, ipecacuanha, tartar emetic, all the ordinary expectorants except ammoniacal salts, can be given in a coated pill as well as in a nauseous mixture. When the drug is of such character that it cannot be readily given in pill unless the dose be very large, it is readily administered in capsules. Oil of eucalyptus should never be given except in capsules. Oil of copaiba has for decades been habitually given in capsules for other than pulmonary purposes; why not also for chronic bronchitis? The ammoniacal salts can be given in capsules as well as in mixture. It may be objected by some, that their local irritant effects would be increased by such method of administration, This does not seem to be a valid objection; but if it is considered so, let the patient drink a half a tumbler of milk directly after ingesting the supposed irritant remedy, and the stomach will be protected much more effectually than if the nauseous drug were given in a teaspoonful of water.—*Therapeutic Gazette.*

CANADA

Medical and Surgical Journal.

MONTREAL, APRIL, 1885.

THE ADVENT OF SMALLPOX.

For the past four or five years the city of Montreal has been entirely free from smallpox, after having been for a long time a prey to that dreaded epidemic disease. This is a fact upon which we have had good reason to congratulate ourselves. But the history of smallpox shows that it comes and goes in waves. It comes, it spreads, becomes widely epidemic, lasts thus for a variable period, and, when it has exhausted all the available material, gradually subsides. Then follows an intermission during which nothing is heard of it, and gradually a sense of security is established and people begin to hope that the terrible experiences of former visitations will never be rëenacted. It is during these temporary lulls that the material upon which smallpox feeds is developed. That is to say, vaccination of children is neglected, and by the time an outbreak occurs many are ready to receive the poison and propagate it to any extent. As we are certainly threatened with the recurrence of smallpox in Montreal, it becomes the duty of the hour to urge the importance of immediate vaccination upon all physicians within the limits of their own *clientele* and upon the Board of Health to redouble their exertions in this direction. On this occasion the disease has been imported from Chicago, where it has greatly prevailed during the winter. About four weeks ago two railway employés from that city arrived here, within a few days of each other, affected with smallpox. One of these was received at the Hôtel-Dieu Hospital, the other was treated by his own physician at his private house. Both cases communicated the disease to others. From the hospital case, two

nurses took it and died ; a medical student took it at his boarding-house, and also died. Twelve other persons have likewise been prostrated from the same source, and are now ill. From the home case four persons contracted it. One of these had gone to her friends in the country, and was there taken down. The others continued in the infected house, and were there treated. It will thus be seen that between 15 and 20 cases were rapidly propagated from the original foci, and it is quite possible there may be other cases of which we have not heard. There has been here a grand opportunity for the Board of Health to stamp out the disease at the very outset, and it is but right to say that if smallpox does not now spread in Montreal, the thanks of the citizens will be due to the prompt and energetic measures instituted by the chairman of the Board the moment the facts were officially reported to him. As soon as possible after the facts were brought to his notice, the Civic Smallpox Hospital was reopened, and now contains all the cases which are known to exist (15). The patients in private houses were strongly urged to be removed to the same place, but refused, and there is no power to compel their removal. Under these circumstances, everything possible was done in the most careful and thorough manner to secure isolation and disinfection. A guardian was placed upon each to warn all persons against entering, the necessary attendants alone being permitted within the building ; abundant disinfectants were supplied and the nurses instructed in their proper employment for all clothing, etc. ; and finally, when the case had terminated, effectual fumigation with sulphur was performed by the sanitary police. The Medical Health officer visited and inspected the entire neighbourhood, and saw that the inhabitants were properly vaccinated. These measures were adopted promptly and carried out with system and energy, and we trust will have proved effectual.

In the absence of any information, we do not know what measures, if any, were taken to isolate the patient first admitted to the Hôtel Dieu. At any rate, that these were eminently imperfect is quite plain from the large number of cases that immediately occurred. The Board of Health consider that once the

case was received into a hospital provided with the usual medical staff, they confided it entirely to them, and could not interfere except upon being requested to do so. This may be quite true, but it is to be regretted that the Smallpox Hospital had not been kept in readiness for the admission of patients. The existence of smallpox in localities in constant railway communication with this city was a standing threat of an invasion sooner or later. Had the Civic Hospital been open, this serious outbreak need never have occurred.

There is a law in force calling upon all medical men to report cases of contagious diseases (which are specified) to the Health Department. This has always remained a dead letter and, we think, is likely to remain so. Physicians will not act the part of informers concerning the families they are attending, and still the Board ought to get the information. In our opinion, the proper persons to give such information are the householders; and we submit that here, as elsewhere, every householder should be bound to at once inform the Board of Health when, to his knowledge, there exists a case of (specified) contagious disorder within his dwelling. In the present emergency, however, we believe that if the chairman of the Board of Health were to address a circular to all our physicians, requesting their cöoperation in this matter, they would get an immediate response, and would receive early notice of any case of smallpox which might occur.

In connection with this matter, it is with pleasure we notice that two regular public vaccinators have been appointed for the city, who will at once see that this important measure is enforced in every ward, and will assist the medical officer in other important sanitary arrangements.

FIELD HOSPITALS AND AMBULANCES.

Fortunately for this Canada of ours, the Field Hospital and the ambulance have been hitherto things unknown amongst us, except in theory. The rebellion of the half-breeds in the North-West, and the fact that bands of Indians have already joined the insurrectionary movement, promises however, now

to render them a stern reality. As soon as the Government began sending a considerable number of our volunteers to these districts, it became necessary for them to organize a staff of Medical Officers to undertake the important duty of providing the best possible surgical assistance in the best possible hospital that circumstances would permit, for the sick and wounded.

Dr. Bergin, M.P., of Cornwall, was appointed Surgeon-General, to remain at Ottawa, control the Medical branch of the service, and advise the Minister of Militia. Dr. Roddick, of this city, was made Deputy Surgeon-General, to proceed at once to the Qu'Appelle district and locate base hospitals in such localities as the General in command might designate. Dr. Douglass, V.C., was made Surgeon-Major and director of the ambulance corps; Hon. Dr. Sullivan, Purveyor General; Dr. Jas. Bell to have the rank of Surgeon, and probably take charge of one of the hospitals; and six Assistant-Surgeons were to complete the regular staff for the present. A number of medical students from this city and Toronto were enrolled as dressers, and have proceeded westward. The whole party left for Winnipeg and the North-West on the 7th inst., and are now on the site of their operations. These appointments are excellent, and will commend themselves to the profession at large; and we have every confidence that no effort will be spared to render the hospital and ambulance service as complete and efficient as possible.

McGILL UNIVERSITY—ANNUAL CONVOCATION.

The annual convocation of the Medical Faculty of McGill University took place on Monday afternoon, March 30, in the William Molson Hall.

Prof. Howard, Dean of the Faculty, read the report as follows:—

The total number of students enregistered in this Faculty during the past year was 234, of whom there were from Ontario, 126; Quebec, 58; New Brunswick, 20; Nova Scotia, 11; United States, 8; P. E. Island, 3; Newfoundland, 3; West Indies, 2; British Columbia, 1; Manitoba, 1; Ireland, 1.

The following gentlemen, 46 in number, have passed their

Primary Examination on the following subjects: Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Materia Medica and Therapeutics, Physiology, Histology and Botany:

Aylen, P., Aylmer, Q.
Blackader, E. H. P., Montreal, Q.
Boggs, C. W., Wolfville, N.S.
Boone, S. W., Fredericton, N.B.
Campbell, A. W., Ingersoll, O.
Carter, L. H., Picton, O.
Cattanach, W., Glen Water, O.
Cowie, Alex. MacD., Montreal, Q.
DeCow, D. McG., Dresden, O.
Dazé, Henri, Montreal, Q.
Dickson, J. A., Trenholmville, Q.
Earl, E. H., Port Hope, O.
Ellis, W. E., St. Catharines, O.
Evans, E. J., Seaforth, O.
Ferguson, W. D., Cumberland, O.
Fillmore, E. W., Baie Verte, N.B.
Flagg, J. D., Morrisburg, O.
Fraser, J. M., Hawkesbury, O.
Gardner, A. W., Cornwall, O.
Haentschell, W. C., Pembroke, O.
Hall, Wm., Walkerton, O.
Hamer, A. L., Bradford, O.
Haythorne, T. J., Charlottet'n, P.E.I.
Johnson, J. W., Vankleek, O.
Kelly, J. A. A., Durham, O.
Kennedy, R. A., Ottawa, O.
Kirkpatrick, R. C., Montreal, Q.
Lafleur, H. A., Montreal, Q.
Leslie, A. C., Watson's Corners, O.
Loucks, W. F., Stirling, O.
McDonald, D. D., N. Lancaster, O.
McMillan, G. A, Dundee Centre, Q.
Morgan, V. H., Aultsville, O.
Norman, T. J., Schomberg, O.
Pomeroy, L. E. M., Tweed, O.
Poole, A., Wakefield, O.
Reavely, E.
Richardson, G. C., South March, O.
Ross, D. L., Winthrop, O.
Ross, L. F., Montreal, Q.
Scully, D. J., Lindsay, O.
Sinclair, D., Guildes, O.
Stephen, G. C., Montreal, Q.
Warneford, P. H., Norton, N.B.
Williams, E. P., Ottawa, O.
Williams, J. F., Barrie, O.
Young, A. A., Barton, Vt.

The following gentlemen, 34 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M. from the University. In addition to the Primary subjects mentioned they have passed a satisfactory examination, both written and oral, on the following subjects:—Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence, Pathology and Hygiene, and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the Hospital:

Arthur, R. H., Brighton, O.
Allan, J. H. B., Mentreal, Q.
Baird, T. A., Chesterfield, O.
Burrows, F. N., Drayton, O.
Cassidy, Geo. O., Goldstone, O.
Daly, Walter S., Ogdensburg, U.S.
Corson, Douglass, Woodstock, O.
Darey, J. H., Montreal, Q.
Dazé, Henri, Montreal, Q.
Doherty, W. W., Kingston, N.B.
Elder, John, Huntingdon, Q.
Eberts, D. W., Chatham, O.
Finlay, F. G., Montreal, Q.
Harkin, F. McD., Vankleek Hill, O.
Hallett, E. O., Truro, N.S.
Hurdman, H. T., Aylmer, Q.
Gustin, Smith, London, O.
Hanna, A. E., Harlem, O.
Hawkins, A. C., Halifax, N.S.
Irvine, R. T., Carp, O.
Johnson, H. D., Charlottet'n, P.E.I.
Klock, W. H., Aylmer, Q.
McMeekin, J. W., St. Catharines, O.
McGannon, M. C., Prescott, O.
McCormack, N., Pembroke, O.
McDonald, H. J., Alexandria, O.
McMillan, D. L., Alexandria, O.
Powell, F. H., Ottawa, O.
Palmer, G. F., Ottawa, O.
Robertson, A. M., Brockville, O.
Shibley, J. L., Yarker, O.
Wishart, D. G., Madoc, O.
Wilson, J. A. K., Manotick, O.
Wood, Edwin Geo., Londesboro', O.

The following have passed in Anatomy and Practical Anatomy:

Easton, C. L. Mackinnon, H.

The following have passed in Chemistry:

Aborn, W. H.
Bradley, W. J.
Berry, J. A.
Bell, J. H.
Boyd, Jay
Bowen, Wm.
Chalmers, W. W.
Christie, Wm.
Davis, A. H.
Edgar, C. J.
Ferguson, J. A.
Fritz, N. W.
Kenny, F. I.
Kincaid, —
Lewis, G. T.
Lafferty, A. M.
McKinnon, H.
McDonald, A. D.
Porthier, C. J.
Porter, J. H.
Parker, W. D.
Quance, S. H.
Woodruff, T. N.
Young, H. E.

The following have passed in Practical Chemistry:

Aborn, W. H.
Berry, J. A.
Boyd, Jay
Bradley, W. J.
Cameron, J. J.
Christie, W.
Davis, A. H.
Fritz, H. D.
Kincaid, R. J.
Kenny, F. L.
Lewis, G. T.
McDonald, A. D.
Parker, W. D.
Pothier, J. C.
Quance, S. H.
Young, H. E.
Woodruff, T. A.

The following have passed in Materia Medica:

Aborn, W. H.
Bowen, Wm.
Boyd, Jay
Brunette, J. T.
Christie, Wm.
Davis, A. H.
Easton, C. L.
Edgar, C. J.
Lafferty, A. M.
Grant, A. S.
McKinnon, H.
McDonald, A. L.
McDonald, A. D.
Porter, J. H.
Parker, W. D.
Porthier, C. J.
Woodruff, T. N.

The following have passed in Physiology:

Aborn, W. H.
Bowen, Wm.
Boyd, Jay
Cameron, K.
Christie, Wm.
Easton, C. L.
Edgar, C. J.
Hall, A. G.
Lafferty, A. M.
McDonald, A. L.
Woodruff, T. N.
McDonald, A. D.
Porter, J. H.
Parker, W. D.
Porthier, C. J.
Wilkins, H. P.

The following have passed in Medical Jurisprudence:

Birkett, H. S.
Clark, J. L.
Craig, M. A.
Crockett, W. C.
DeCow, D. McG.
Duffett, J. L.
Earl, E. M.
Elder, J.
Gairdner, T. M.
Gibson, J. H.
Gladman, G. J.
Graham, J.
Grant, J. H. V.
Hawkins, A. C.
Hughes, P. H.
Kinloch, J. A.
McCallum, E. P.
McCuaig, A. J.
McDiarmid, G. A.
McGannon, T. G.
McKay, J. M.
Morgan, V. H.
Orton, F. H.
Poole, A.
Pringle, W. R.
Raymond, A.
Raymond, G. H.
Robertson, F. D.
Rowat, W. M.
Schmidt, A. F.
Schmidt, A. J.
Seery, F. J.
Turnbull, A.
White, F. J.
White, W. W.
Wilkins, H. P.
Williams, J. F.
Wilson, C. W.
Wishart, D. J.
Worthington, A. H.

The following have passed in Hygiene :

Aylen, P.
Birkett, H. S.
Christie, Wm.
Clarke, J. L.
Cowie, Alex. MacD.
Crockett, W. C.
Cunningham, H. C.
Duffett, J. L.
DeCow, D. McG.
Earl, E. H.
Evans, W. H.
Fillimore, E. W.
Gairdner, T. M.
Gardner, A. W.
Graham, J.
Gibson, J. B.
Gladman, G. J.
Graham, —
Grant, J. H. Y.
Hawkins, A. C.
Hamer, A. L.
Haythorne, T. J.
Hughes, P. H.
Kennedy, R. A.
Kinloch, J. A.
Kirkpatrick, R. C.
McQuaig, W. J.
McDiarmid, Geo.
McDonald, A. D.
McDonald, A. L.
McDonald, D. D.
McCollum, E. P.
McGannon, T. G.
McKay, J.
McKay, Eugene
McMillan, G. A.
Morgan, V. H.
Orton, T. A.
Poole, A.
Pringle, W. R.
Raymond, Alf.
Reavely, E.
Rowatt, W. M. L.
Robertson, F. D.
Ross, L. F.
Schmidt, A. J.
Schmidt, A. F.
Seery, F. J.
Turnbull, A.
Williams, J. F.
Wilkins, H. P.
Wilson, C. W.
White, F. J.
White, W. W.
Worthington, A.

The following have passed in Pathology :

Birkett, H. S.
Boggs, G. W.
Clarke, J. L.
Crockett, W. C.
DeCow, D. McG.
Duffett, J. L.
Elder, J.
Earl, E. H.
Gairdner, T. M.
Gibson, J. B.
Gladman, G. J.
Grant, J. H. Y.
Graham, J.
Hawkins, A. C.
Hughes, P. H.
Kennedy, R. A.
Kinloce, J. A.
Kirkpatrick, R. C.
Morgan, V. H.
McCallum, E. P.
McKay, J. M.
McCuaig, W. J.
McGannon, T. G.
McMillan, G. A.
McKay, Eugene
McDiarmid, G. A.
Orton, T. A.
Poole, A.
Pringle, W. R.
Rowatt, W. M.
Ross, L. F.
Raymond, G. H.
Raymond, Alf.
Robertson, F. D.
Schmidt, A. F.
Schmidt, A. J.
Seery, F. J.
Turnbull, A.
Wishart, D. J.
White, F. J.
White, W. W.
Wilson, C. W.
Willioms, J. F.
Worthington, A.
Wilkins, H. P.

The following have passed in Physics :

Baer, D. E.
Bell, J. H.
Bradley, J. W.
Bowen, W.
Berry, R. P.
Clouston, J. R.
Castleman, L.
Chalmers, W. W.
Conroy, C. P.
Deacon, S. D.
Davis, A. H.
Dickson, A.
Dearden, J. D.
Desmond, F. J.
Evans, W. H.
Fritz, H. D.
Ferguson, J. A.
Gunn, D. T.
Girdwood, G. W. T.
Green, D. T.
Goodwin, W. W.
Hopkins, H. J.
Hubbard, O. H.
Hubert, P. J. H.
Hewitt, J.
Hoare, H. C.
Horner, A. S.
Irwin, W. J.
Kennedy, J. H.
Kenney, F. L.
Kincaid, R. J.
Kincard, R. W.
Kendell, H. E.
Knapy, H. D.
Kirkpatrick, R. J.
Lewis, G. T.
Loucks, F.
Lang, W. M.
Lafferty, A.
McLennan, D.
McFarlane, M.
McDonnell, A. E. J.
McKinnon, H.
McCarthy, J. J.
McKay, H. H.
McKinnon, H.
Metcalfe, F. J.
Miller, J. T.
Morrow, C.
Mowat, M.
Orr, J. E.

Orr, A. E.
Parker, W. D.
Park, P. C.
Pomeroy, L. E. M.
Porter, —
Potts, J.
Pothier, C. J.
Quance, S. H.
Robertson, H. E.
Rowatt, A. R.
Stewart, A. D.
Springle, J. A.
Shepperd, A. A.
Telfer, W. J.
Thompson, J. W.
Vernier, H.
Wilde, H.
Woodruff, T. A.
Wesley, R. A.
Whitmore, F. H.
Young, H. E.

The following have passed in Botany:

Baer, D. C.
Berry, R.
Castleman, L.
Clouston, J. R.
Conroy, C. P.
Deacon, J. D.
Desmond, F. J.
Dyer, R. C.
Girdwood, G. W.
Greene, H. D.
Goodwin, W. W.
Hewitt, J.
Hoare, C. W.
Hopkins, W. J.
Hubbard, O. H.
Irwin, W. T.
Kennedy, J. H.
Kerr, N.
Kincaid, R. M.
Kirkpatrick, E. A.
Lafferty, A. M.
Lang, C. H.
Lewis, G. T.
McFarlane, M.
Mackay, H. H.
Mackinnon, G. W.
MacLennan, D.
McMartin, D. R.
Morrow, C.
Orr, A. E.
Orr, J. E.
Park, R. C.
Potts, J. M.
Robertson, A. G.
Shepherd, R. A.
Stewart, A. D.
Springle, J. A.
Thompson, J. H.
Weagan, A. A.
Westley, R. A.
Westmore, F. H.

The following have passed in Histology:

Aborn, W. H.
Boer, D. C.
Berry, A. P.
Bradley, W. J.
Cameron, K.
Castleman, A. L.
Conroy, C. P.
Davis, A. W.
Deacon, J. D.
Dennis, J. T.
Desmond, F. T.
Easton, C. L.
Eleard, J.
Fritz, N. W.
Gunn, N. D.
Goodwin, W. W.
Hopkins, H. T.
Holden, —
Hubert, P. T.
Hamilton, A.
Hawkins, A. C.
Hubbard, O. H.
Hewitt, J.
Irwin, W. T.
Kerr, N.
Kennedy, J. H.
Kendall, H. E.
Kincaid, R. J.
Kincaid, P. M.
Kirkpatrick, E. A.
Kenny, F. L.
Lafferty, A. M.
Lang, Wm. M.
Long, H.
Moffatt, M.
Murray, W. N.
Morrow, C.
McDougall, D. T.
McFarlane, M.
McLennan, D.
McKay, H. H.
McMartin, D. R.
McKinnon, G. W.
McCarthy, J. G.
Orr, A. E.
Orr, J. E.
Park, J. C.
Potts, J.
Pothier, C. J.
Porter, J. A.
Quance, S. H.
Reavely, E.
Robertson, A. G.
Springle, J. A.
Stewart, A. D.
Shepherd, R. A.
Telfer, W. J.
Thompson, J. W.
Vernier, H.
Wylde, C. F.
Wesley, R. A.
Whitmore, F. H.
Young, E.

MEDALS, PRIZES AND HONOURS.

The Holmes Gold Medal for the best Examination in the Primary and Final Branches is awarded to Edwin G. Wood, of Londesborough, Ont.

The Prize for the best Final Examination is awarded to Smith Gustin, London, Ont.

The Prize for the best Primary Examination is awarded to Ed. J. Evans, Seaforth, Ont.

The Sutherland Gold Medal is awarded to H. A. Lafleur, B.A., Montreal.

The following gentlemen, arranged in order of merit, deserve honourable mention :

In Primary Examination—H. A. Lafleur, J. A. A. Kelly, D. L. Ross, E. H. P. Blackader, R. A. Kennedy, L. F. Ross, T. J. Haythorne, R. C. Kirkpatrick, Wm. Hall and J. M. Fraser.

In the Final Examination—F. G. Finlay, H. T. Hurdmann, M. C. McGannon, T. A. D. Baird, John Elder, D. W. Eberts.

PROFESSORS' PRIZES.

Botany—Prize, T. A. Clouston.

Practical Anatomy—Demonstrators' Prizes: 2nd year. H. A. Lafleur, Montreal. 1st year, W. J. Bradley.

Clinical Medicine—Junior Class, H. S. Birkett, Hamilton, Ont.

PROFESSOR VON FRERICHS.—We have this month to lament the loss of the foremost teacher of clinical medicine in all Germany—Prof. Frerichs—who died at Berlin on 17th of March, in the 56th year of his age, and the 26th year of his professoriate. He was Professor of Clinical Medicine successively at Kiel and Breslau, and in 1859 was called to Berlin University. His best known work is his treatise on "Diseases of the Liver," which was translated into English by Murchison.

—It is with great pleasure we learn that the *Index Medicus* is to be continued. This periodical, giving, as it does, complete references to what is published in all parts of the world in every department of medicine, makes it invaluable to all who desire to learn the precise state of knowledge in any subject in which they may be interested. To those attempting original work, such a publication is simply invaluable ; and the time and labor necessary, in the absence of such a journal, to form any adequate estimate of the work already done is so great as often to deter from the project altogether. It should be on the bookshelves of every public medical library, and among the journals of all medical societies, if not in the private collections of all progressive medical practitioners.

Medical Items.

American Medical Association.—The thirty-sixth annual session will be held in New Orleans, La., on Tuesday, Wednesday, Thursday, and Friday, April, 28th, 29th, 30th, and May 1st, commencing on Tuesday 11 at a.m.

Personal.—Drs. W. J. Johnston and Ruttan, (McGill 84') left New York on Friday last, by the North German Lloyd line, for Berlin via Bremen. While there, Dr. Johnston intends pursuing the study of Pathology, and Dr. Ruttan, that of Chemistry.

—Mr. Lawson Tait says: "The amount of worry which is given him by every case of hysterectomy, even when successful, is such as to be almost beyond the recompense of any fee; and the disappointment inflicted by every death is quite indiscribable."

—Iowa is the illiterate physician's paradise, no requirement being made for the practice of medicine. If a man or woman has the gift of gab, lots of cheek, especially if he or she can dress well and make a good appearance, they will succeed in making a practice. The less education he has the better. Little or no moral character required, either. This is the status of the medical profession in Iowa.—*Iowa State Med. Journal.*

—No nation hankers for the honor of originating venereal disease. The Neapolitans call it the French disease; the French, the disease of Naples: the Poles call it the German disease; Hollanders and Englishmen refer it to Spain; the Orientals lay it to the Franks, the Persians to the Turks; the Portuguese christen it Castelian and the Chinese call it the disease of Canton. Other peoples follow the same rule as those mentioned. Syphilis has no father who is willing to stand responsible for its birth.

—A correspondent of the *Journal of the American Medical Association* is impressed with the number of operations for the amputation of the cervix uteri performed in Berlin. He thinks few women in Berlin can have normally preserved uteri. He says the students have a saying that there is not a woman living on the street with Martin's Hospital who has an entire cervix uteri. The temptation to resort to an operation for the glory of publishing statistics and for achieving renown is a great one, and is inflicting injury upon gynæcology. Indeed, other departments of surgery are not unscathed.

CANADA

MEDICAL & SURGICAL JOURNAL

MAY, 1885.

Original Communications.

ADDRESS DELIVERED AT THE OPENING OF THE SUMMER SESSION CLINIC FOR DISEASES OF THE NERVOUS SYSTEM, McGILL UNIVERSITY, April 14th, 1885.

By HENRY HOWARD, M.D.

Gentlemen,—Your professor, and my esteemed friend, Dr. Stewart, kindly invited me to give the opening lecture to his summer session clinical course on diseases of the nervous system. I consented to do so with great pleasure, because I know he will treat his subject from the standpoint of a physical scientist, the only point from which any of the diseases of the human frame can be treated scientifically.

Yesterday I received the *American Journal of Neurology and Psychiatry*, one of the best edited journals on this continent, which contains the valedictory address of the Hon. Wm. Barns, past-President of the Society of Medical Jurisprudence and State Medicine, in which he says, reviewing the work of the past year : "At the fifteenth regular meeting of the Society, held in May, "1884, Dr. Henry Howard of Montreal read a paper entitled "*Why Lawyers and Doctors fail to agree*. Dr. Howard main- "tained that experimental philosophy was the only true basis "upon which to found all jurisprudence--all medical jurispru- "dence, all education, and all social order ; and that physical "science should be the beginning and ending of *all* education. "If penal codes were based upon it, the criminal would be tried

" by nature's laws for any offence against social order, and, if " convicted, would be separated from Society as an abnormal " man that must be taken care of, both for his own sake and the " protection of society, and to return to society only on becom- " ing a normal man."

I have quoted for you the foregoing that you may learn that any opinions that may fall from me while delivering this lecture cannot be stronger than those I have already expressed, and which have been already published.

When we treat of man in his normal state, we simply treat of organized matter and its phenomenon, organs and their physiology or functions. In fact, let us treat of nature as a whole, of which man forms an integral part, and we have nothing to treat of but matter and its phenomena. In the vast universe that, in truth, we possess so little knowledge of, there may be some other entity besides matter, if so be that matter be an entity and not a phenomenon; but we don't know it—we cannot find it out by physical research. As physical scientists, we only know and treat of matter and its phenomena, things of the natural order, and of this, I regret to say, our knowledge is very limited. Strange that the subject which is of the greatest importance to man should be the subject, of all others, man knows least of. In all the past countless ages man seems to have considered it his first duty to try and find out the supernatural, and they are now as near to the attainment of their object as they were millions of years ago. Doubtless there is a supernatural. I believe myself, most fervently, there is, because natural presupposes supernatural; in other words, *cause* supernatural for *effect* natural. Physical science leads us thus far, but no further. We cannot treat of the supernatural by means of the natural order, therefore, as physicists, we have to treat of nature and nature only—that is, of matter and its phenomenon. Some believe that matter differs in kind. I only find that it differs in degree, and that it is indestructible; and in this I am in accord with the greatest physical scientists or experimental philosophers in the world. Judging the degree of matter by its phenomenon, the highest degree is the nervous system in man, and as this system itself

differs very much in degree structurally, so, consequently, must it differ in degree functionally, for all the varied functions of the various degrees of matter owe their functions to their structure, and alterations of functions must in all cases be preceded by alteration of structure. For example, the structure of the cornea, or glass of the eye, is transparent, and one of its functions is to transmit rays of light; but if this function is lost, if from disease the cornea is rendered opaque, then the function of transmitting light is lost. Motion is the function of muscular fibre, but if the motor nerve that supplies the muscle becomes paralyzed, the muscle, for the time being, loses its function.

Experiments on animals by vivisection, and the experiments that disease and accidents make on man, has proven that the grey or cortical substance of the brain is, more particularly, the structures of which mind is the function, although, in reality, there is no part of the nervous system which is not either directly or indirectly connected with the function of mind. Consequently I have given to the whole nervous system the term materia cogitans, or mind matter, or matter of the mind. Now mind may be an entity, or it may be in all matter, only we can't find it: we can only find it as phenomena of nervous matter, and where there is not nervous matter we cannot find mind. Therefore, when you ask me, as a physicist, what is mind, I must answer you a phenomenon of nervous matter. That is the language of physical science, and, unlike metaphysics, is at least comprehensible, or admits of being reasoned upon. The metaphysician may assume something else, but the physicist, as such, cannot admit of assumption; he treats only of the natural order, and only knows physical facts. Now, then, if you enquire of me, what is mind in the abstract? I answer you, I don't know; I only know it as a phenomenon of matter. What is force? A phenomenon of matter. What is sensation? A phenomenon of matter. What is consciousness? A phenomenon of matter. What is moticity? A phenomenon of matter. What is intellect? A phenomenon of matter. What is instinct? A phenomenon of matter. What is automatomism? A phenomenon of matter. What is reflex action? A phenomenon of matter. What is con-

duct? A phenomenon of matter. What is electricity? A phenomenon of matter. What is that which we call life, in its three different degrees—dynamic in the mineral matter, biological in the vegetable matter, and biotic in animal matter? Physical science teaches us that even life is a phenomenon of matter. There may be life without matter, I don't say there is not. It may be an entity; I don't say it is not. I only say it is only demonstrable to us as a phenomenon of matter.

It is well, then, gentlemen, that when we come to treat of all, or any, of the different forms or degrees of all the different diseases that man is heir to, either by hereditary transmission, traumatism, or idiopathicism, that we only know matter and its phenomena, and of it only can we treat—that is, we only know man anatomically and the functions of his organs and tissues.

I must warn you now, gentlemen, that it has become fashionable—as fashionable as evil-speaking, lying, slandering and bank robbing—for the most immoral portion of society to hold up their hands with an assumed holy horror, and denounce the teaching which I have now given to you as sceptical, malevolistic, infidel, and irreligious. But don't you trouble yourself about what these people say. It is not a question of religion at all, and, believe me, you can believe all this that I have just said, as a physical scientist, and much more, and yet be honorable Christian gentlemen, or honorable gentlemen without the prefix Christian —Jews, for example, who are certainly as honorable as Christians.

There are others, good men, who, under the false impression that the natural is antagonistic to the supernatural, about which they know so little, protest against physical science, and would arrest us in our search of nature's laws. Mistaking sentimental conversation for religion, they will not even study physical science, afraid it should disturb their sentimentalism.

I would have physical science, or natural experimental philosophy, the basis of medical education. I would have it practically studied, by observation, from nature. I would have it the basis of law, order and civilization. I would have all men to know all they possibly could of nature's laws, and live in obedience to them. I would have the fact taught that all the so-

called sciences, if sciences at all, were physical sciences. I would have it taught that the very first principle of physical science was the fact that we had nothing to study nature from but matter and its phenomena; that is, material structures and their functions. That although matter was one, differing only in degree; that because of this difference, there were various structures, and consequently as great a variety of phenomena, I would have less books, and more observation, particularly in the education of youth, providing them with such a natural moral environment to draw their knowledge from, such as technical education provides, that the environment itself would cultivate their physical intellectual organization during the evolution or development of their intellectual organs.

If our social order was based upon nature's laws, and if we lived in accord with these laws, there would be but little occasion for either doctors or lawyers, because disease and sickness is due to a breach of nature's laws, and crime is the outcome of either teratological or pathological defect of organisms, from breaches of nature's laws. I would throw no obstacle in the way of any man in studying any of the arts, which I call also physical science, nor of language. But the standard of merit, if I admitted such a standard, in schools, colleges and universities, should be a knowledge of physical science or experimental philosophy.

You ask me would I interfere with the teaching of the supernatural. I have already said I believe in the supernatural, therefore, as a matter of course, I could not oppose its teaching; but I recognize that of necessity, while the two orders—supernatural and natural—are different, they are not antagonistic, and should not be made to clash.

And now, gentlemen, with your permission, I will turn to the nervous system. A vast subject, a truly grand subject, is disease of the nervous system—the one of all others which connects us with the physiology of the whole human frame; but a subject nearly, or I may say absolutely, impossible for any teacher to do justice to, or for students to derive much benefit from, unless the teacher has provided himself with plenty of abnormal living

material, and I vouch to you that your professor has taken good care to provide himself with an abundance of this material. I was agreeably surprised, I might say astounded, when visiting his dispensary, to see the number of cases he had succeeded in collecting, representing so many different phases of the diseases of the nervous system, both local or peripheral, and general or central, and in different stages of pathological defect. I even saw many in the different stages of teratological defect. I was particularly struck with the features of one imbecile boy, whom no doubt you in time will see, which caused me to turn to your professor and say, "These are the sort from whence come our criminal class of society." Now there are two things to possibly save such boys as that from becoming criminal fools: time and favorable circumstances, such as a good environment, while evolution is causing the development of the cortical substance of the brain, and all other portions of the materia cogitans.

In my making use of the expression agreeably surprised, I hope you do not for a moment suppose that it was, or is, a pleasure to me to find that a large portion of the human race are immoral criminal fools, and that because of teratological or pathological defect in some part of their materia cogitans. What I meant by the expression was simply that, knowing such to be the case, I was both pleased and surprised to find that your learned professor had succeeded in surrounding himself with so many of these cases, not only as a clinical teacher, but because of the benefit these creatures were receiving from what I saw to be scientific treatment.

True physical science, when applied to the treatment of disease, consists in our recognizing the fact that for physical effect there must be physical cause, and in our treatment of disease, our duty is, when we see effect, to look for cause. Treating disease from any other standpoint, no matter how successful such treatment may be, is empiricism—it is not science; and until this truth is recognized and acted upon by the medical profession generally, none of us can claim to be members of a purely scientific profession. The same reasoning, from the same premises, is equally applicable to the members of all other professions, and to none

more so than those of the legal profession, whose members cannot even comprehend justice or equity unless as physical scientists. Legislatures cannot make just and equitable laws, except as physical scientists, consequently we have such everlasting bungling and empiricism in the making of our laws, even the pitiful sight of law-makers breaking one law by making another. The law-maker, the administrator of the law, the lawyer, and the medical man, as well as he who cultivates the growth of a tree, or fashions a steam-engine, all equally alike must recognize the physical fact, and act upon it, that for physical effect there must be physical cause ; to act otherwise is to act unscientifically and immorally.

No doubt, because of our ignorance of physical laws, we are sometimes, as it were, forced to empirical practice in our profession. Frequently, for want of knowing the cause of suffering, we render a person insensible by a dose of chloral or morphine. And can any one deny but that much of the practice of the present day of the gynæcologists is not empirical. How many cases of young girls more particularly, now treated for uterine diseases, never had that organ diseased. Hear what Dr. Wm. Goodell, of the University of Pennsylvania, says on that subject: "The crying medical error of the day is the mistaking of nerve disease for womb disease. From this widespread delusion it has come to pass that no organ in the human body is so overtreated and, consequently, so maltreated, as the womb."

Gentlemen, this sort of medical treatment is neither scientific nor moral. Here scientific morality, in the treatment of all diseases, consists in knowing the physical cause for physical effect, and this we never will know perfectly till physical science be made the basis of medical knowledge. I said scientifically, and have added the term morally, for moral conduct depends upon physical cause. What is conduct? We judge of every man by his conduct, and properly so ; but how would we define conduct. Whether it be good or bad, what is it? It is simply muscular motion, for which there must be a cause. In other words, conduct, whether good or bad, moral or immoral, is the effect of a cause. Your clinical teacher will show you a para-

lyzed muscle, and he will tell you it is a badly-conducted muscle, because it does not perform its normal function. It is an immoral muscle ; it does not, because it cannot, obey the will, or cannot be controlled by the inhibitory function of the intellectual nerve centre. He will tell you that this muscle is an immoral, badly conducted muscle that cannot perform its normal functions, because the nerve that supplies it has lost its force, and discharges no force to the muscular fibre to cause these fibres to contract, so that the loss of nerve function causes a loss of muscular function. Here is the effect of a cause, and your clinical teacher, before prescribing therapeutical treatment for this case, or rendering a prognosis, will first search for the cause of all this troublesome effect, which he finds. He being acquainted with the general anatomy and physiology of the nervous system, knows that this paralyzed nerve may suffer from a pathological defect, in any part of its course, from one of numerous causes, either chemical or mechanical ; that it may be central, or that it may be local—that is, peripheral,—but wherever the lesion may be localized, lesion there must be, whatever be its nature, because there cannot be functional change without structural.

It is absurd to speak of any morbid or abnormal state of any portion of the human frame as merely functional. There can be no functional derangement without structural derangement, no matter how simple it may be ; but it is not necessary that we should find structural defect in the immediate locality of functional defect. For example, what we term dyspepsia is very frequently due more to cerebral than to stomach structure, and, on the other hand, some of the brain functions may be deranged through fault of stomach structure. Any peripheral irritation may cause derangement of the functions of the nerve centres, and any lesions of any of the centres may only develop itself through the medium of their peripherals. These are facts well known to every educated member of the profession ; but the trouble is to diagnose. Where is the structural derangement for the functional effect ? That is the question of questions in our profession. That is what you will, to a great degree, learn, in the course of lectures you are about to enter upon, on the

diseases of the nervous system. This is an education not to be got from books. You may be able to commit to memory a library of books, and yet not know the most simple of those nervous diseases when called upon to diagnose it. No, gentlemen, to diagnose these diseases you must learn from your observation of nature; even then, in very many of these obscure cases, you will only succeed in a true diagnosis by exhausting the negative, a practice very successfully resorted to by that recognized scientific neurologist, Dr. E. C. Seguin of New York.

I would next point out to you, gentlemen, that as physical science teaches us that all matter is one, only differing in degree and not in kind, so does it teach us that nature is one of which man forms an integral part, consequently man should learn of her, know her laws, and live in obedience to them above all things; that he should learn the fact that he who lives in the breach of nature's laws does so at his own risk, and is sure to bring upon either himself or his offspring her just punishment. Nature is no respecter of persons: she makes no allowance, not even for ignorance. She inflicts sure punishment for the breach of her laws, not only to the third and fourth generation, but to the tenth and twelfth generation. If any knowledge would make man a moral man, this knowledge should do so, but, unfortunately, it has not. And why? Simply because the immoral man is a criminal fool, in virtue of some pathological or teratological defect in some part of his materia cogitans, no matter what may have been its somatic etiology. Every man's conduct is the outcome of the functions of his materia cogitans. If its functions be normal, the man's conduct will be normal, and he will consequently be a moral man, living in obedience to nature's laws, and delighting in his knowledge of them. If its functions be abnormal, his conduct will be abnormal; he will be a fool, and consequently an immoral criminal. The materia cogitans, like unto all other organic structures, has its peculiar functions, which functions are what the structures make them. If the structure be normal, the function will be normal and conduct normal. If the structure be abnormal, the function will be abnormal and conduct abnormal. We know a moral man by

observing his conduct and finding it in accord with his good environment, and we know his conduct is the outcome of force or phenomenon of his materia cogitans. So the immoral criminal fool shows what he is by his conduct, and we know that his conduct is also the outcome of the forces or phenomena of his materia cogitans. In the one case there is normal structure and function of the materia cogitans, causing right action. In the other case, there has been abnormal structure and function of the materia cogitans, causing wrong action. This is the ethical explanation of right and wrong. From a physical standpoint, morality and intelligence are the product of one ; immorality and folly the product of the other. This is a law which governs all matter ; all its phenomenon or force depends for its characteristic upon its mechanical and chemical structure, and the highest knowledge we can possibly attain to is the knowledge of matter and its phenomena. Matter in all its different degrees ; phenomena in their numerous and varied forms.

As physical scientists, we cannot help recognizing that all criminals are fools, whether it be due, in each particular case, to teratological or pathological defect in the person's materia cogitans. If from pathological defect we term the person a maniac, if from teratological defect we term such a person an imbecile or fool, the fool or imbecile has never been anything else but a fool or imbecile, because of teratological defect ; and his degree of imbecility will depend upon the deformity or teratological defect in his materia cogitans. If the imbecile be young, his materia cogitans may improve by growth and development, so that he may cease to be a fool, and grow up to be a moral man. But if he has outlived the age of development, and be an immoral criminal fool, such is he likely to remain to the end of the chapter, to be a curse to all whom he comes in contact with. Such fools are to be found in all the different grades of society, as society is graded. It is quite different with the insane or maniacal fools. They have lost something which they possessed—their intelligence ; lost it by pathological defect in their materia cogitans. They should be treated with the most scientific care, with the object of restoring the abnormal organ

or structure to a normal state, after which there will be normal function and normal conduct.

There are many persons under the impression that because a man is what they term smart, that he is necessarily an intelligent man. Never was there a greater mistake. An immoral criminal fool may be, and very generally is, smart, clever ; and, indeed, it is necessary to be such to be a successful criminal. But all that does not give proof of intelligence, no more than does the memory of words. An intelligent man must necessarily be a moral man ; indeed the terms morality and intelligence are synonymous terms. Morality and intelligence are functions of the higher nerve centres in the cortical substance of the cerebrum. These centres are cells whose functions are to receive the forces carried to them from without by means of the afferent or centripital nerves, also called sensory nerves. and when these forces are received, to adjust them and store them up for use when required, then, by their emissive functions, discharge these forces to the muscles by means of the afferent or centrifugal nerves, thus causing muscular action or conduct. These higher intellectual nerve centres possess not only the functions of receiving forces, adjusting forces, storing forces, and emissing but they have also the functions of sensation and inhibition ; and in virtue of all these functions, these centres are the centres of intelligence and conduct, and all these functions will be good or bad as the structure of the materia cogitans be normal or abnormal.

It is an established physical fact that the higher the nerve centres, the lower the organization ; and the lower the nerve centres, the higher are they organized. This explains how rapidly a man changes from sanity to insanity, from being an intelligent man to be a fool. It is a very slight cause that will injure the structures of the cells constituting the higher nerve centres, and, consequently, disarrange their functions because of their low organizations. It is well known what a glass of brandy, a dose of opium, or a whiff of ether or chloroform will do with these nerve centres ; fortunately, the lower centres, because higher organized, are not so sensitive to these drugs,

or there would be more deaths from inebriety, and, consequently, less fools and maniacs.

Why are the highest centres the lowest organized? For two reasons. First, they are not actually necessary for life, as others are; their destruction does not cause death. Secondly, they are chiefly formed and altogether developed after birth. Those centres most, or actually, necessary for existence are the first developed and the higher organized. The higher centres being the last evolved and developed, accounts for the fact that wisdom comes with age; and being of so low an organization accounts for the other physical fact that, in the natural order of things, they are the first to decay, consequently it so frequently occurs in old age that intelligence declines while yet the vegetative organs, so highly organized, are healthy and vigorous. Then the truth of the old adage is established, "Once a man and twice a child." None of us, gentlemen, would, I hope, desire to live to that stage of existence; better the end of evolution.

Taking the nerve centres from above downward, we have next in order, after intelligence, the instinctive centres, then the automatic and the reflex. Now the lower the intellectual functions, such as we have it in infancy and childhood, the higher do we find the instinctive, the automatic and the reflex functions. I speak of normal functions. For example, all other things being equal, we observe in infancy and childhood how much more active these functions are than in manhood; and we find that as the intellectual functions increase the lower functions decrease; a child is solely guided by the functions instinctive, automatic, and reflex, while the intellectual man is governed by his intellectual centres, consequently his other high centres, but lower than his intellectual, for want of use, lose to a great degree their functions. But let this man, from some pathological defect in his materia cogitans, lose the function of intelligence and become insane from the loss of equilibrium in his mental forces, such, for example, as is found in a drunken man, and immediately he is governed, not by his abnormal intellectual nerve centre, which has, at least for the time being, lost its functions, but by

his normal instinctive, automatic and reflex centres and their functions. The functions of these centres can be normal while the functions of the intellectual centres are abnormal. But these centres have no inhibitory nerve centre to control their functions and consequent conduct, because the nerve centre, which, by its inhibitory function, controls man's general conduct, comes from the organ of intelligence, so that conduct to be moral, must be intelligent and moral—that is, under the control of the intellectual nerve centre in virtue of its inhibitory function.

The drunken man, who is intellectually a fool, will escape such extraordinary dangers, have such narrow escapes of his life, protected by his lower centres, particularly the functions of his instinctive centres, that it appears to the ignorant and superstitious to be miraculous, which has given origin to the old saying that there is a special providence to watch over and care for the drunken man.

From closely observing the foregoing physical laws which governs our organisms, particularly our higher nerve centres and the nerve circulation of molecular force, we can understand that an intellectual man must necessarily be a moral man, and that an immoral criminal is a fool—a fool because wanting in intelligence, wanting in inhibitory nerve force, his conduct is the outcome of the functions of his instinctive, automatic and reflex nerve centres, and possessing these centres, together with the sympathetic and emotional, and all their functions, there is no reason why such a fool should not also be a cunning knave, and pass for a smart business man who can dupe and get money even out of the most intelligent men by appealing to their sympathy.

Notwithstanding the fact of the increase of insanity, or pathological defect in the higher nerve centres, no doubt chiefly due to their low organization, yet there is hardly a case that the general practitioner is called upon to treat that is not in some way connected with the lower nerve centres or their peripheral branches. The lower nerve centres in man, and in the whole animal kingdom, are the first evolved, and necessarily the highest organized; and all other things being equal, they are the last

to decay, yet, from a thousand different causes, both chemical and mechanical, are they subject to pathological defect, and although abnormal disintegration in the higher nerve centres causes mania and imbecility or dementia, yet their destruction does not necessarily terminate in death, whereas abnormal disintegration or dissolution in lower nerve centres does terminate in death. Now normal evolution and dissolution is the natural law of our existence, and our organisms—that is, of our higher intellectual centres—discharge their forces in virtue of the law of disintegration and rëintegration, so that by the latter law these organs recuperate all they loose by emissing force. But should, from pathological cause, rëintegration become arrested, the result will be mania in some stage from loss of equilibrium in the mental forces, loss of intellectual forces. Now so many of our vital organs are dependent for their motive forces upon the lower nerve centres that abnormal disintegration in them generally terminates in death, so that while abnormal disintegration in the higher centres leads to a loss of equilibrium in mental forces and consequent insanity. Abnormal disintegration of lower centres leads to death, if so be that it supplies force to a vital organ (lungs or heart for example), and paralysis, if to a muscle or tissue. All these facts you will learn by the clinical course of lectures you are about to enter upon. Keep always, gentlemen, before your eyes that in dealing with physical science there may be, and certainly is, great ignorance as yet, but there is no mystery. We have nothing to treat with, or of, but matter and its functions. Let us be only sure that structure is normal, then we will know that function is normal, and the consequence will be that conduct will be normal also.

When we consider the nervous system with regard to mind, as one of its functions, or forces, or phenomenon, we must remember that it is as much a circulating system as is the vascular system. The latter mechanism circulates the blood into every part of the animal economy by means of that great pump, the heart. So does the nerves circulate vital or molecular force into every part of the animal economy by that great ganglion, the brain, and all the lesser ganglia. The whole ganglionic

system has very properly been called the heart of the nervous circulation, and, reasoning from analogy, we are justified in concluding that any pathological defect of the nervous system, particularly in the afferent or efferent nerves, or in the higher nerve centres, which defect would in any way obstruct molecular circulation, must of necessity affect mind as one of the functions of the materia cogitans, and that such a cause would also affect some one or more of the function of any of the lower nerve centres. Not only that, but we have a right to expect that any irritation of the peripheral afferent nerves must derange the functions of their centres.

When there is such a large anatomical surface in such numerous nerve tubes and fibres for the circulation of molecular force, and when we consider the number of these nerves that have other functions, such as trophic and vasomotor, because of their union with the great sympathetic system, we are not surprised to find that there are so many different physical causes to derange the equilibrium of mental functions and cause mania ; nor, under the circumstances, can we be surprised at finding so many of the lower centres suffering in their varied functions. We cannot wonder at the various degrees of mania and its various psychological developments, and we must see how necessary is the history of a case and the necessity of a knowledge of all its physical symptoms, as well as that of conduct, to enable us to diagnose the locality of the nerve lesion in the materia cogitans, and to find out whether that lesion be the result of chemical or mechanical cause. It is only by attaining to this knowledge that mania can be treated scientifically ; indeed no disease, no more than mania, can be treated scientifically unless we know its somatic etiology. Treatment, under any other circumstances, is, as I have already said, empirical, no matter how successful it may be, and empirical treatment is sometimes very successful, yet it is not science.

I have pointed out the physical fact that the lower nerve centres are the first evolved and the highest organized, and the higher nerve centres the last evolved and lowest organized : that the lower centres are actually necessary for life, and the higher

for intelligence. Morphology teaches us that it is the same laws that govern the evolution of all animal organisms. The lower the animal organisms are, the fewer and more simple the nerve centres ; the higher the animal organisms, the more numerous and complicated the nerve centres, but the higher the functions of these centres. An animal without any intellectual nerve centres will have the higher instinctive, automatic and reflex centres ; that is, the functions of these centres will be of a higher order than will the same functions in an animal with high intellectual functions. All other things being equal, a woman is not, with all due respect for the sex, as highly organized, intellectually, as man ; but a woman's instinctive functions are very much higher than man's, so much so as to sometimes make it appear she was of the higher order of intellect. A woman instinctively will know there is danger, and guards against it, long before a man will discover it by his intelligence ; but this does not justify giving a woman the *same* high education as man—they are not fitted for it, socially, morally, intellectually or politically. There is no reason why they should not have as high, or even higher, education than man, but not the *same :* the difference in their organisms and their functions forbid it. The stations of the man and woman are two different stations, both equally honorable but not the same in the natural order ; both in accord with their physical organization ; both intelligent, but not the same intelligence.

A dog who, of the lower animals, it would appear, is the highest in intelligence next to man, but still much lower than man, will instinctively recognise danger before a man will recognize it by his intelligence. And as we descend from the dog to the lower grades of animal organisms, we find it to be a physical fact that the lower the functions of the higher organisms, the higher, comparatively, are the functions of the lower centres, or lower organisms. Let us take reproduction of species as the best and most familiar physiological proof, and we find the lower the organism the more prolific, so that from observation we have the homely term, " ill weeds grow apace."

From the foregoing facts, it is no very difficult thing to under-

stand, what I have more than once observed, that a man can be an immoral and criminal fool for want of intelligence, and, at the same time, in virtue of lower centres, whose functions are instinct and automatomism, a smart and clever business man.

In speaking so much on the general physiology of the nervous system, it was that you might, in some degree, be interested as well as instructed, for I can conceive no more interesting subject to the medical student or medical man than the physiology of the nervous system, seeing that all our functions are in virtue of that system. If our functions be normal, it is because the structure of the nervous system is normal. All force that is subjective is through the nervous system. All that is objective, from whence we receive knowledge, is by the nervous system also. And although, properly speaking, that particular portion of the nervous system which constitutes the materia cogitans, no doubt, is the grey matter, the cortical portion, whether it may, or may not, have other functions, pathology has demonstrated the fact that wherever there is grey matter, whether covering the brain, the spinal cord or any other nerves or ganglions, in one form or another, there we find mind as a phenomenon of that matter.

Whether, as I have already said, mind be an entity or not, we do not know, and it is doubtful if we ever will know ; but we are sure that we can possess no knowledge of it, except as a function of grey nerve structure. As I said in the opening part of this lecture, there may be mind in all matter, but we only can recognize it as a function of the materia cogitans. So it is with biotic life, or conscious sensation. We only find it in animal organisms as a function of the nervous system, as we find biological life with motion and apparent sensation as functions of vegetable organisms, and dynamic life in minerals. But consciousness we only know as a function of the materia cogitans. Dr. Mercer of London, England, one of the recognized physiologists of the day, speaking of the functions of man, says " his chief functions are to eat and to work. We work that we may eat, and eat that we may work. We cannot live without eating ; and we cannot eat without working." Not a very high standard,

gentlemen, for that supposed God-like animal, man; nevertheless, we have to swallow the description as a great physiological truth.

As to the diseases to which the nervous system is subject, their name is legion. The afferent or centripetal nerves and the efferent or centrifugal nerves are subject to all sort of lesions in every part of their course, both mechanical and chemical. The same is it with the sympathetic and vaso-motor nerves, and all the nerves of sense. And not only are not all these nerves subject to various forms of disease, but the same may be said concerning all nerve centres, whether their centres be situated in the cortex of the brain, medulla oblongata, or spinal cord. In fact, it is impossible for any one part of the human frame to suffer from any disease whatever without complication with some portion of the nervous system. You may rest assured, that to go through the names of all these different diseases and lesions will take more than one lecture. And here I would give you one warning, and that is, never to treat lightly the most simple lesion of a peripheral nerve, for such lesions are always dangerous, whether the cause be chemical or mechanical.

Remember that in animal organisms two laws are always going on at the same time, viz., evolution and dissolution, and that there should be an equilibrium between these forces, it is as necessary that we should have a normal vital circulation through the nervous system as it is to have normal blood circulation through the vascular system. Always bear in mind that, as medical men and physical scientists, in the treatment of diseases we know no mystery, but for every physical effect look for a physical cause.

Gentlemen, there are but few medical practitioners who, looking back to the days of their studentship, have not regretted opportunities lost that never returned; something that they had left undone that they wished they had done, for the faults of youth are more of omission than commission. But once a man begins his medical practice, and to struggle with the world for his daily bread, he cannot go back again. I would, therefore, urge upon you not to neglect the opportunity now offered of

clinically studying nervous diseases, or the day will surely come when, if you do so, you will deeply regret it; and if the study of the nervous diseases is important, no less so is the therapeutical study of the medicine by which you expect to treat its diseases successfully. You must not only know the physiology of animal matter, but the physiology of vegetable and mineral matter. Then when you have diagnosed pathological defect in any part of the nervous system, you will be the better prepared to prescribe the most suitable medicine to restore the pathological organ to its physiological state of existence.

Gentlemen, you will, I regret to say, meet many men in the medical profession, as well as outside of it, who, ignorant of physical science themselves, will sneer at it, and try to turn you from the study of it, by speaking loudly about learning something practical, meaning thereby empirical treatment of disease. But if you would be scientiffc mediciners, you must be physicists, you must be men to study the physiology of matter in all and every degree of its stages, mineral, vegetable and animal, and then will you be truly scientific medical men. Then may we look forward, hopefully, for the time when the medical profession will be a truly scientific one, because it will be based upon physical science or natural experimental philosophy. And to the man of law, I would, with the highest respect, say, "Don't reject physical science, because it teaches you that every man is intellectually and morally what he is, in virtue of the functions of his physical or structural organization, but rather study it carefully, that you may be the better able to comprehend the causes of all the different effects that come under your observation in this world of uncivilized barbarians not governed by the natural law of the survival of the fittest, but the survival of those who know no law but that might is right, who are incapable of settling a constitutional question except by leaving the question to be settled by the arbitrament of the sword."

NOTES ON THE MORBID ANATOMY OF PNEUMONIA.*

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My post-mortem records include 105 cases of lobar pneumonia, all of which, with one or two exceptions, occurred at the Montreal General Hospital. For the purposes of this article, I shall exclude five cases, in which either the data are incomplete, or about which I have some doubt. As is the case at most large hospitals, the death-rate from pneumonia at the Montreal General is high, due to the facts first that, as a rule, only the severer cases are brought in, and second that a considerable proportion of the cases occur among enfeebled and dissipated paupers, who rapidly succumb to such an acute affection as pneumonia. In the statistical report of Dr. James Bell,† the mortality for a period of ten years was somewhat over 25 per cent., one-third of the deaths occurring within forty-eight hours of admission. As a contrast, it may be stated that the mortality of the pneumonia cases in the practice of Prof. R. P. Howard of Montreal, during a period of twenty years, was only 4.8.

The statistical details are as follows:—

Sex.—Of the 100 cases, 70 were in males and 30 in females.

Age.—In 94 instances the age was given; up to the tenth year, 5 cases; between 10th and 20th, 6; from 20th to 30th, 12; between 30th and 40th, 18; between 40th and 50th, 21; between 50th and 60th, 12; and over 60, 20 cases.

Lung affected.—In 51 cases, the right; in 32 cases, the left; in 17, both. As to the position of the inflamed region in the lung the figures are: in the right, whole organ solidified (except, perhaps, narrow margin at apex and anterior border) in 17;

* Read before the Pathological Society of Philadelphia, April 23rd, 1885.

[This, with other articles on morbid anatomy which will follow from time to time, will constitute my third and last Pathological Report from the Montreal General Hospital.]

† Montreal General Hospital Reports. Vol. I. Dawson Bros. 1880.

lower lobe alone, in 18; upper alone, in 7; middle and lower, in 3; middle and upper, in 2; upper and lower, in 3. In the left lung, entire organ in 10; lower lobe in 16; upper lobe in 6. In the cases of double pneumonia, it was most often the lower lobes which were affected together, but in three instances the lower lobe of one lung and the upper of the other were affected; in three cases both upper lobes; and in *Case XLIX* the most extensive inflammation of both lungs occurred—the left was in a state of uniform red-hepatization, with the exception of the anterior border, and the right in the stage of grey-hepatization, except still smaller portions of the corresponding regions. Altogether, in 39 instances a lower lobe was involved, in 19 an entire lung, and in 16 the upper lobe.

Weight of lungs.—To estimate the amount of solid exudation, the lungs were generally weighed. The heaviest was in *Case XLVIII*, a man aged 40, whose left lung, uniformly solid, weighed 2303 grammes, and the right, very congested and œdematous, 900 grammes. (The normal lung weight is between 600 and 700 grammes.) In eight cases the affected lung weighed about 2000 grammes, representing rather more than three pounds of solid exudate.

State of lung tissue affected.—In about one-half the cases, the inflamed area was in a state of red hepatization. In 30 per cent. there were regions of grey hepatization with the red, and in 22 cases there was grey hepatization either dry or passing into the condition of purulent infiltration.

State of uninvolved portions.—Usually the crepitant parts of the affected lung were greatly congested or intensely œdematous. The latter was invariably the case when the whole organ, except the apex and anterior border, was involved, which then presented a condition of almost gelatinous œdema. The unaffected lung was generally congested and œdematous, particularly at the posterior part. It was not uncommon to find the anterior portions quite dry and bloodless, while the dependent regions were full of blood and serum. No doubt this is largely due to post-mortem subsidence. We do not always find extensive congestion or œdema in the uninflamed parts. Thus in *Case XXXII*, in which

the lower lobe of right lung was hepatized, the upper and middle lobes were noted as "very dry and bloodless," whereas the left lung was œdematous, except at anterior borders. So, also, in *Case LVIII*, a woman, aged 50, with red hepatization of left lower lobe, the upper lobe was crepitant throughout, dry on section, no redness, and no blood. The right lung was also crepitant (except a fibroid apex), dry, no œdema, and very little blood.

Air passages.—The bronchi generally contained a frothy, serous fluid—not often the tenacious mucus characteristic of pneumonic expectoration. The mucous membrane was usually reddened, rarely swollen. In the affected regions the smaller bronchi very often contained fibrinous plugs, and in twelve instances these were noted as very abundant and extending into the larger tubes of the inflamed region, forming perfect casts of the bronchi.

The *bronchial glands* were invariably swollen, succulent, occasionally very soft and pulpy. In no instance was there suppuration.

The pleuræ.—When the inflammation reaches the surface of the lung the pleura is inevitably involved, with the result, commonly, of a thin sheeting of exudate, perhaps of such delicacy that it only produces turbidity of the membrane. In only two instances the pneumonia was deep-seated, and did not reach the pleura; in every other instance this membrane was involved in a greater or less degree. In some cases the fibrinous exudate was extraordinarily thick and extensive, as in *Case V*, in which the right lung was uniformly solid, weighing 3 lbs. 6 ozs., and every portion of the pleura was covered by a creamy fibrinous layer an inch in thickness.* In several cases there was copious exudation, amounting to three or four pints. In six cases there was extensive double pleurisy, with pneumonia on one side only. *Case XV* illustrated how readily the inflammation could cross the anterior mediastinum and spread from the pleura of left upper lobe to that of the right.

Among the more uncommon terminations of pneumonia, there were cases of abscess, gangrene, and fibroid induration.

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* Specimen in the museum of McGill College.

Abscess.—When a lung in a state of purulent infiltration is examined, we wonder that softening and breaking down of the lung tissue is not a more frequent result of this process. In four instances there were definite small abscesses. In *Case XXXIV*, a woman, aged 56, with grey hepatization of the right upper lobe, there was a small abscess cavity, with shreddy walls, the size of a walnut, in the anterior portion of the lobe. The tissue about it was in a state of purulent infiltration. In *Case XXXVI*, male, aged 60, with grey hepatization of upper half of left lung, there were in the central part of the upper lobe several spots of softening, the size of marbles, irregular, with ragged, uneven walls and purulent contents. *Case LXXVII*, female, aged 64, with almost uniform consolidation of left lung, the upper lobe was in a state of intense purulent infiltration, and there were in the middle portion several large abscess cavities communicating with each other, with ragged walls and purulent contents.

Gangrene.—In three instances this termination was met with. *Case LIV*, a woman, aged 35, a hard drinker, was admitted with pneumonia of the left lung, which had existed for some days, during which she had been neglected and much exposed to the cold. The lower lobe presented at its apex and extreme base signs of consolidation, but in the rest of its extent was represented by a large gangrenous cavity, occupied by shreddy and necrotic lung tissue and blood clots, the whole forming a stinking mass.* The walls were not defined, except at the lower part, where a separation between the sloughing and firmer lung tissue could be plainly seen. In *Case LX*, male, aged 63, with pneumonia of the left lung, there was a spot of gangrene at the apex surrounded by dark consolidated tissue. *Case LXXIV*, male, aged 50, a hard drinker for 20 years, admitted supposed to be suffering with delirium tremens; had had convulsions before admission. Rigidity of muscles of arms, coma and death 36 hours after admission. At apex of right lung a gangrenous mass the size of a hen's egg, surrounded by greenish-black consolidated tissue. Suppurative meningitis of cortex.

* Specimen in mueseum of McGill Medical Faculty.

Fibroid induration.—The production of a chronic—so-called interstitial—pneumonia from the ordinary croupous form is, perhaps, the most rare termination of the disease. The following case is of special interest, from the fact that the man was under observation almost from the outset, and the induration was in patches and in an early stage:—Louis Phillippe, aged 58, a laborer, was admitted with cough and pain in the side. Had a chill five days before admission. Temperature 101°F.; pulse 106; respiration 26. Expectoration not bloody. Physical signs of pneumonia over right lower mammary, infra-axillary, scapular and infra-scapular regions. During the first ten days in hospital patient made no satisfactory progress; temperature ranged from 99° to 103°; he was heavy and dull, not delirious; pulse weak, 100 to 120. Defective resonance in infra-clavicular regions on right side; in mammary region, a flat tympanitic note; behind, absolute dulness, feeble-blowing breathing; a few râles on deep inspiration. The note over right mammary was markedly tympanitic. Patient emaciating. No heart murmur; very little expectoration, muco-purulent, not bloody. On the 26th day he had a chill, and the temperature went up to 104°. No change in physical signs. Died at noon of the 27th day after admission. The right lung was uniformly solid, greyish in color, with recent pleuritic exudation, and the surface, on section, bathed with serous fluid. On carefully inspecting the cut section, three features called for attention. In the first place, in certain regions the air-cells could be seen with their fibrinous plugs, of a very opaque white character, undergoing fatty change. This state existed in very considerable areas. Secondly, there were small localized areas densely infiltrated with pus, and breaking down into definite abscesses. The largest of these was about the size of a marble. And thirdly, in several areas of the lung there were spots which had a very translucent aspect, were firm, smooth, homogeneous, not granular, and had the look of a recent connective tissue. In these areas a fibroid change was going on in the lung; the alveolar walls were thickened, and the fibrinous plugs filling the air-cells were undergoing transformation into a new growth of connective tissue.

State of the other Organs—Heart.—Distension of the chambers, particularly the right, with very firm, tenacious coagula, is a very constant feature in pneumonia autopsies The right auricle is usually very full, and a solid mould, capped usually with a buffy layer, can generally be removed with the extensions into the cava and many of its branches. I have seen a complete cast of the branches of the superior cava, even to the smaller vessels, and a mould of the inferior cava, including the hepatic and the iliac branches. From the pulmonary artery there can be withdrawn, by careful manipulation, a dendritic clot representing the vessels of quite small calibre. In no disease, I think, are we likely to meet with such solid coagula—so firm and fibrinous; and on several occasions, when I did not know the nature of the case, the preliminary incisions for the right chambers have enabled me to make a shrewd guess as to the existence of pneumonia. In many instances the engorged state of the right side and condition of general venous stasis, suggested the possibility that a copious venesection might have relieved the overloaded chambers—and I have in several cases acted with benefit upon this suggestion. In extensive red hepatization the circulation in the inflamed area must be very much impeded, and the work of the right ventricle greatly increased. If we may reason from the experiments of Welch,* the collateral œdema, which we have so much dreaded under these circumstances, has no existence; for he seems to show very clearly that to produce pulmonary œdema the blood pressure must be raised to a point very much beyond that which can be induced by the cutting off of certain territories of capillaries, however extensive, in a pneumonia. Yet there are difficulties in the way of explaining the œdema of the sound portions of the lung on the view which Prof. Welch holds, viz., that the left ventricle is first weakened or paralyzed and the continued action of the right gradually produces the engorgement and œdema. It seems natural to think that the engorged right ventricle would more quickly fail than the left, which is rarely

*Virchow's Archiv. lxxii.

found so full, and certainly has not to bear the strain and tension of the right chamber.

The left chambers usually contained coagula, but were rarely distended, never to the degree often met with in the right.

The tricuspid orifice was frequently found dilated, measuring from five to six inches in circumference.

Turbidity and moderate fatty change were sometimes noted in connection with the heart muscle. The endocarditis will be considered with the complications.

Spleen.—Friedreich and others have called attention to the very general enlargement of this organ in pneumonia. The normal weight may be taken at about 170 grammes. In only 35 cases was the weight over 200 grammes—the heaviest, in *Case LXXV*, was 670 grammes. In 12 cases the weight was under the average ; in *Case LV* it was only 72 grammes. Usually the pulp was very soft ; but in four cases the note is, " pulp firm, and cuts well." In many cases the weight was not recorded, but the note entered was either " normal " or " slightly enlarged."

Kidneys.—In exactly 25 per cent. these organs showed signs of interstitial changes, being hard and fibroid, with adherent capsules and often small cysts. In eight cases there was marked parenchymatous swelling; in *Case XXIII*, chronic parenchymatous nephritis ; in *Case XXV*, amyloid degeneration, and in *Case XXXII* extensive fatty changes in the tubules.

Other Diseases and Injuries.—One case occurred in connection with diabetes and one with erysipelas. Three cases followed injuries, one a burn, and one came on in the course of a carbuncle. In all, the pneumonia was fibrous and lobar. These cases of " contusions-pneumonia," as Litten terms this form,* are very interesting, and may come on after slight or severe injuries, or after operations.

COMPLICATIONS.

Pericarditis occurred in five cases. In two there was extensive double pleurisy with the pneumonia. In one there was

*Zeitschrift fur Klin. Medecin., Bd. V.

endocarditis as well. Except in *Case XCIII*, a portion of lung contiguous to the pericardium was involved in each case.

Endocarditis.—I have on several occasions called attention to our exceptional experience in this respect, though, indeed, a review of the literature shows that the occurrence of this complication in pneumonia is by no means infrequent, In 16 cases there was endocarditis, either of the simple or malignant types, most often of the latter. In five instances these were simple warty vegetations, and there were no special cardiac symptoms. In 11 cases the lesions were more extensive, usually of the ulcerative form, and the character of the disease was much altered, or even masked by this complication. Our cases bear out Bouillaud's suggestion that endocarditis most frequently complicates left-sided pneumonia, but in a review of 36 cases of endocarditis occurring in this disease, and in which the lung affected was mentioned, I find that in 20 it was in the right side and only 10 in the left, so that it seems doubtful if contiguity has anything to do with it.

Meningitis.—In eight cases there was meningeal inflammation, in seven pia-arachnitis, and in one dura-arachnitis. In five of these cases there was also ulcerative endocarditis. Brief details of the cases may be given :—*Case II*, male, aged 38 ; red hepatization of upper lobe of right lung, extensive exudation at base of brain, in longitudinal sinus and along the Sylvian fissure.

Case LXVII, woman, aged 64. Grey hepatization of left lung, with small abscess cavity ; the under surface of the dura-mater of left hemisphere covered by a sheeting of recent lymph, which could be detached in flakes. No lymph beneath the arachnoid or at the base.

Case LXXXIV, male, aged 50. Grey hepatization of right upper lobe and a spot of gangrene. Intense congestion of cortical meninges and exudation of lymph in patches over the frontal and occipital lobes ; none at the base.

The following cases were associated with endocarditis :

Case XXVIII, female, aged 29. Upper half of right lung hepatized. Mitral ulcerative endocarditis. Meningitis of the cortex. A thick flake in the neighborhood of the left fifth nerve, and another about the optic chiasm.

Case L, male, aged 40. Lower lobe of right lung. Extensive endocarditis of mitral and aortic valves. Thick creamy lymph over sides and upper surfaces of the hemisphere. None at the base.

Case LXXIX, male, aged 43. Lower half of left lung affected. Endocarditis, mitral and aortic. Meningitis of the left hemisphere, with exudation of lymph over the frontal and parietal convolutions. None at the base or on the right side.

Case LXXXVII, male. Double pneumonia; right apex. Ulcerative endocarditis of mitral. Cortical meningitis. No lymph at the base.

Case XCIX, female, aged 19. Red hepatization of central part of right lung. Endocarditis of anterior segment of mitral valve. Meningitis of cortex—both hemispheres.

The complication of meningitis is one of the most serious that can occur in pneumonia, and it would appear, in a considerable proportion of the cases, to be associated with ulcerative endocarditis. We may suppose the inflammation of the heart and the meninges to be induced by a common cause, or, what would appear likely in many cases, the meningitis is embolic in origin, for it also occurs in malignant endocarditis, unassociated with pneumonia. In 20 cases of meningitis in this disease, only 15 occurred with pneumonia. The infective material may possibly be derived directly from the infiltrated lung tissue, and carried off by the pulmonary veins. We know that occasionally large emboli may be derived from this source, as in a case of pneumonia occurring at the General Hospital in 1879, in which, during the progress of the disease, and not associated with endocarditis, there was embolism of one femoral artery and gangrene of the leg, necessitating amputation above the knee.

The inflammation in these cases is almost always cortical, and the chief symptoms are initial delirium, then stupor and coma, sometimes rigidity of the muscles.*

* The literature of meningitis in pneumonia is scanty. From Vulpian's clinic a good thesis was written by Surugue (1875). In the St. Thomas' Hospital Reports, 1878, some cases are given by Greenfield, and there are valuable references in that storehouse of clinical material, Traube's Gesamelte Abhandlungen.

Croupous Colitis.—In *Cases III, XXVIII, XLII, LXXXV* and *XCIX* this unusual complication was met with. In *Case III* the cœcum was covered with a thin layer of adherent lymph, and scattered throughout the colon and sigmoid flexure there were numerous elevated patches of lymph, about the size and shape of rupia-crusts, which on section were found firmly attached to the mucosa. In this instance, the process was very extensive and the patches much thicker than in any subsequent case. More often there is a thin, flaky exudation, involving only the surface of the mucous membrane. In none of the cases was there ulceration.

Croupous Gastritis.—In *Case IV*, the stomach and duodenum were found " greatly distended with gas. The mucosa was pale, except about the fundus, where, just to the left of the cardia, there was an extensive area of croupous inflammation, represented by a thick, adherent greyish-white exudate, covering an area 12 by 8 cm. Beneath the mucosa the membrane was deeply injected."

This paper is meant to be merely a statement of facts, a record of observations, upon a common and well-known disease ; but as opinion is still divided as to the general or local nature of pneumonia, it is interesting to note how strongly the evidence from morbid anatomy tends towards the former view. The frequency of the occurrence of various consecutive inflammations finds a parallel only in some of the specific fevers.

While this paper has but a trifling value as a pathological contribution, to the writer, as doubtless to the students who performed the autopsies under his direction, the careful study and observation of the cases upon which it has been based has been of the greatest service. In the investigation of disease a knowledge of the morbid phenomena observed during life and of the organic alterations found after death are inseparable. The teaching of the post-mortem room must supplement and illustrate the lessons of the ward, and, as Bichat says, it is neither from the one nor the other, but from both, that " la veritable pathologie " can be gained.

CASE OF PULSATING EMPYEMA, SIMULATING ANEURISM—SPONTANEOUS RUPTURE AND RECOVERY.

By GEORGE ROSS, A.M., M.D.,
Prof. Clinical Medicine, McGill University; Physican to the Montreal General Hospital, &c.

(*Read before the Medico-Chirurgical Society of Montreal, March 6*, 1885.)

G. W., æt. 37, express-driver, was admitted into the Montreal General Hospital on the 29th December, 1884, suffering from sharp pain in the left side, a short cough, and feverishness. Two of his brothers have died of phthisis. He himself has always been a strong and healthy fellow. Had pneumonia five years ago, with which he was in bed for three months. Never had rheumatism nor syphilis, and has never been affected with thoracic pain or shortness of breath.

His present attack began on the 24th December, when he got a severe wetting, and did not feel very well. Was drinking a good deal at the time. On the 26th he had a chill, followed by sudden stabbing pain in the left side. Took to bed the same day, and had a short, hacking cough, with slight expectoration.

On admission.—Patient is a strong, able man, of good muscular development. Face flushed, with dilated venules. Skin hot and dry. Herpetic eruption on lips. Pain is much complained of, situated in the left lower axillary region, considerably increased on inspiration and by pressure over the same part. Cough short, and accompanied by pain and expectoration, which is of a glairy, mucous character. Temperature 103° at night. Pulse 120, small and weak. Respirations 24, short and shallow. Tongue moist and coated.

Examination shows somewhat deficient expansion upon the left side. Dulness on percussion at the left base, where the respiratory murmur is weak and accompanied by a few crackling râles. Resonance and fremitus diminished in the same area. Heart sounds are feeble, and free from murmur. The urine contains a heavy deposit of lithates; no albumen.

The patient continued in much the same condition for several days, the temperature pretty high, and the pulse always above 120. The pain only slightly diminished. On the 2nd January,

the note gives dulness to angle of scapula and through lower axillary region. During the following week he suffered a great deal of pain in the left side, not specially confined to the lateral region, as before, and more continuous, preventing him from sleeping, and making him look feeble and exhausted. The fever still remained, and he inclined to sweat a good deal.

I did not see him during this time, but re-examined him on January 8th, when the following notes were made : The dulness in the lower areas of the left side much less. On percussing the front of the chest, a flat note is found commencing at the upper margin of the second left costal cartilage, and continuous with that of the heart. This dull area is bounded externally by a line drawn through the nipple, and it passes as well directly across the sternum and to a finger's-breadth to the right of this bone. The expansion movement of the left front is much impaired ; the second and third intercostal spaces are observed to be prominent, and to present a quite perceptible pulsation, synchronous with the systole of the heart. On palpation, the pulsations are felt quite strongly. Resonance and fremitus much diminished. The vesicular murmur is almost absent in the dull area, and is found, moreover, to be markedly enfeebled throughout the whole left lung.

During the two weeks following, the case appeared to be stationary. The temperature fluctuated somewhat, but was always above normal. He sweated a good deal, and emaciated considerably. The pain was persistent, and rendered intolerable by any attempt to lie upon the left side. The physical signs were those last described.

On the 22nd January, a rough friction-sound was heard along the right margin of the sternum, from near the clavicle to the third rib. At this time he had increased fever, with nausea and vomiting ; and on this and the following day the pain was more especially complained of about the dull region under the left clavicle.

On the night of the 2nd February he had a severe fit of coughing (having had but little cough for some days previously), which was immediately followed by the out-flow of a good pint of

pure pus. This was thick and creamy, and had no ill-odour. The whole of it was brought up in a few minutes. When seen the next morning, he had a loose cough, every effort serving to bring up a large mouthful of pus. In this way half a pint or more was expectorated during the day. The percussion-note of the previously dull area at once changed to a clear and somewhat tympanitic note. The pulsating tumor had entirely disappeared. The breathing was cavernous, and accompanied by bubbling râles. The respiratory murmur throughout the left lung has become stronger.

A loose cough, with some purulent expectoration, continued for a few days, and then ceased entirely. The temperature fell at once to normal, and has there remained. The percussion quickly became pulmonary in quality, the respiratory murmur was re-established everywhere, and the râles disappeared. Sleep and appetite soon returned, and on the 2nd March the patient left the hospital strong and well.

Remarks.—From the history of this case, as above detailed, it is sufficiently evident that a considerable collection of pus was formed in the upper part of the chest, upon the left side, as a result of an acute pleuritic inflammation. That this localized empyema was so situated that it communicated very distinct pulsations either from the heart itself or from the aorta to the surface of the thorax. That it subsequently opened and discharged itself through the air-passages, thus allowing the corresponding lung to entirely re-expand. That thus a complete and spontaneous cure was brought about. It will have been noticed that evidence of the early stages of the pleurisy—friction-murmur—in the situation later occupied by the effusion was not observed. This probably arose from the fact of attention having been directed to the base of the lung, where the trouble seemed to be entirely located at the commencement. When I re-examined the patient myself on the 8th January, I discovered the very striking physical signs which have been mentioned. One can hardly fail to be struck with the remarkable similarity between this collection of signs and those so frequently met with from an aneurism of the thoracic aorta—viz., localized well-

defined dull area to one side of and beneath the upper portion of the sternum, prominence of the spaces, and, above all, pulsations very distinct and easily both seen and felt. Moreover, very decided enfeeblement of the respiratory murmur in every region of the left lung. The case was therefore reviewed with the idea of this possibility borne in mind. There was no bruit, there was no intensification of the second sound (the more important, diagnostically, of the two), there was no fulness or palpable pulsation behind the manubrium, there was no downward traction upon the trachea. These points decided, I thought positively, against aneurism. Moreover, the clinical history of the patient previous to his present acute attack was entirely negative as regarded the usual subjective symptoms of thoracic aneurism. We had, too, the very best reasons for believing that, on his admission, no such physical signs were present, as he had been examined by my house physician and by an experienced clinical clerk. The combined dulness, enfeebled breathing and diminished fremitus accompanying and following upon the evidences of inflammatory action plainly declared by the continued pain and marked febrile disturbance—all pointed to the presence of fluid, and probably purulent fluid. The pulsation, of course, was a very unusual feature in the case, but that this occasionally is produced through purulent effusions we all very well know. The observation which I found most difficult to explain was the decided obscuration of the vesicular murmur throughout the entire lung. The percussion-note was not obviously altered from that of the opposite side, except at the extreme base, where a small effusion was rapidly disappearing; and the conclusion was inevitable that the absence of tidal air must be explained by the existence of pressure upon the main bronchus. I have never before met with this condition as a result of an advancing collection of fluid. On the other hand, how common it is to find it brought about by the advancing pressure of a growing neoplasm or aneurismal tumor. Although, therefore, we had good reason to look upon the local trouble as probably an empyema, I thought that the possible existence of some obscure neoplasm (not an aneurism) was not to be lost

sight of, as, perhaps, complicating the case. A few days later, the occurrence of loud frictions to the right of the sternum proved the existence of continued inflammation of the serous membrane. The happy termination of the case you already know; and the fact that, after spontaneous evacuation of the purulent collection, the left lung responded completely, with resonance and tidal wave unimpaired, showed conclusively that the entire set of symptoms and physical signs had been produced by a localized empyema.

Empyema is a sufficiently common condition, and we all meet with many examples of it, occurring under a great variety of circumstances, in the course of our regular practice, but, although these collections are quite frequently situated upon the left side, yet it is very rarely indeed that the pulsations of the heart or great vessels are communicated through the purulent fluid. Rare, however, as such cases undoubtedly are, they must nevertheless be borne in mind, for they are apt to simulate aneurism, and cause errors in diagnosis. In the majority of instances, the situation and extent of the dull area will be such as to offer no difficulties of the kind, but in cases like the one I have described, the physical signs are accurately limited to just such an area as might be occupied by an aneurismal tumor. If this patient had been seen for the first time on January 8th, and with an imperfect clinical history, it might have required very careful examination and the employment of the method of exclusion in order to arrive at a correct opinion.

This symptom has been known for a long time. Fraentzel (Ziemssen's Cycl.) quotes the expressions of an old writer, Le Roy, to prove this. "When, with these indications (of empyema) which we have given, a troublesome beating arises in a certain part of the chest, we must not hastily conclude that an aneurism is present." "When the collection of pus is so placed that the action of the heart or of the great blood-vessels makes an impression upon it, there sometimes arises the false appearance of an aneurism."

I think that in this case the pulsations observed were communicated from the aorta. This vessel, being filled by each

successive systole, would necessarily compress any sac of fluid in immediate contact with it and, if the latter touched the thoracic parietes, cause visible projections upon the surface. On the other hand, when pulsations are observed in the side of the chest, from the heart itself, these must be produced by the lateral movement of the heart from right to left during the systole; because, with contraction, the heart does not increase in bulk, and could not, therefore, produce compression of an adjacent body of fluid. The full explanation of these communicated pulsations is an interesting subject, and one on which but very little that is satisfactory is to be found in medical literature.

CLINICAL NOTES ON "SWALLOWING OF THE TONGUE."

By GEO. W. MAJOR, B.A., M.D.,

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"Swallowing of the tongue," though a recognized possibility, is of rare occurrence. The literature, upon this subject, is meagre, but few cases having been recorded. Additional interest may attach to the following report, in that the phenomenon was observed with the laryngeal mirror:—

Betsy K., widow, æt. 30, a native of Poland, applied at the Nose and Throat Clinic of the Montreal General Hospital, on March 28th, 1885, for treatment. The patient showed syphilitic heredity, as evidenced by a saddle nose and partial destruction of the velum. The latter condition was turned to good account in conducting the laryngoscopic examination. The woman was of a highly nervous and hysterical temperament, she constantly heaved deep sighs, and complained of a sinking feeling, with weakness.

I noticed that repeated acts of forcible deglutition were followed by a deep inspiration, when breathing would suddenly cease; but after a few seconds of suspension, an expiratory effort would be ushered in by a distinctly audible *clucking* sound, which evidently afforded great relief to the patient.

On examination with the laryngoscope, a clear view was readily obtained. The pharyngo-larynx was very spacious, and beyond a little congestion, was fairly healthy. The action of the ventricular bands and vocal cords showed no tendency to spasm.

On continuing the exposure, the tongue was observed to retract, impinge upon the epiglottis, and then quickly recover its normal position in the mouth. This process, which was several times repeated, was followed by a deep inspiration; when the base of the tongue would press down the epiglottis, completely obscuring it from view, and impact itself against the pharyngeal wall, thereby preventing the entrance and exit of air. After a few seconds, the spasm of the tongue would relax, the epiglottis would be released, accompanied by the sound before referred to, and breathing would once more be restored.

The loss of a portion of the soft palate and pillars greatly facilitated these observations, and enabled me, on half-a-dozen occasions, to demonstrate the *modus operandi* of this peculiar neurosis, (for as such I regard it) to my class in laryngology, at the summer session.

Under tonics and nervines, improvement followed, and though the tendency to the attacks still continues, the act is incomplete, and as a result, respiration is not seriously interfered with.

"Swallowing of the tongue" may possibly be confounded with spasm of the glottis. A knowledge of its possible occurrence, however, will go far to prevent an error in diagnosis.

I am not aware of any recorded instance, where this condition has been before observed with the laryngoscope. In the published cases, many of which were fatal, division of the frenum linguæ and whooping-cough were the chief factors. In these, the tongue was retroflexed and the tip became wedged in the throat. This was not remarked in my case, in which the difficulty was due to the base of the tongue pressing upon the epiglottis.

In the administration of chloroform, "swallowing of the tongue" may occur; but by drawing the tip forward with forceps, danger is averted.

A concise report of the literature upon this subject was published by Henning of Leipsic (*Jahrb. für Kinderheilk*, Vol. XI.,

p. 213), and may be found in the *American Jour. of Obstetrics*, January 1878, p. 208.

Dr. J. Solis-Cohen, in speaking of laryngeal spasm, says :

" In some cases of supposed spasm, the tongue is swallowed, as it were, occluding the larynx ; and this is occasionally fatal." (Cohen on Diseases of the Throat and Nasal Passages, 1880, p. 628.)

Dr. Ingals, of Chicago, reports an interesting case with remarks, in the *Archives of Laryngology*, Vol. II., p. 135.

Not more than half a score of cases have been recorded ; but in absence of laryngoscopic examination, no absolute certainty can exist as to the precise nature of any of them.

QUARTERLY RETROSPECT OF OBSTETRICS AND GYNÆCOLOGY.

PREPARED BY WILLIAM GARDNER, M.D.,
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At a recent meeting of the New York Academy of Medicine, held at Nashville April 14th, 15th and 16th, 1885, Dr. James B. Hunter read a paper on " *Endometritis Fungosa.*" According to his own experience, Dr. Hunter said, fungosities proper were never found in the cervical canal, though they might be found immediately beyond this. They resembled small polypi, and while seldom exceeding five millimetres in diameter, were usually much smaller than this. Neither the number of the growths nor their size seemed to have any proportion whatever to the amount of hemorrhage resulting from their presence. They were of a pale pink color, had an abundant vascular supply, and there was always a distinct fibrous element in their structure. They constitute a truly inflammatory tissue, and were characterized by no process at all akin to degeneration, although Dr. Thomas, in his work on diseases of women, alluded to the condition as fungous degeneration of the lining membrane of the uterus. It had often excited remark that such profuse hemorrhage should result from such an apparently slight cause ; but this was in reality not to be wondered

at when the great extent of surface presented by the cavity of the uterus when studded with these growths was taken into consideration. The superficial area of the endometrium was enormously increased by the presence of even a few of them. The question of the true cause of the hemorrhage resulting from them, however, had been avoided by all writers on the subject with whose works he was acquainted.

In making a diagnosis of endometritis fungosa, it was sometimes quite difficult to exclude sarcoma and epithelioma from the examination of a single specimen, and, hence, it was very desirable that repeated examinations should be made. Great care and perseverance were, therefore, often necessary in order to arrive positively at a correct diagnosis.

As to the symptomatology, the principal, and, indeed, only symptom of importance was menorrhagia; pain being quite rare, as a rule. In this condition the menstrual period was likely to be increased; while in carcinoma there was a metrorrhagia, rather than a menorrhagia. Sarcoma usually did not appear until after the 35th year; but endometritis fungosa might occur at any time during the childbearing period as well as (though more rarely) both before and after the latter. The affection had no connection whatever with syphilis or gonorrhœa; but was often associated with uterine fibroids. Dr. Hunter then called attention to the differential diagnosis on the one hand between endometritis fungosa and such foreign growths as polypi, adenomata, retained decidual remains, papillomata (which were believed to be always a friend to the cervical canal, and thus occupying a distinctly different position), and the so-called villous degeneration of the endometrium referred to by Goodell; and, on the other, from malignant affections. Among the latter, round-celled sarcoma is most liable to be mistaken for it, and is not so common as Dr. Mundé, in his paper sent to the Edinburgh Obstetrical Society, in 1878, and other authors had stated. In addition to microscopical differences, there are certain points by which a differential diagnosis may be made, and among these are the following: In endometritis fungosa there is little pain, while in sarcoma the pain is

apt to be a prominent feature. In the one there is, as a rule, menorrhagia; in the other, metrorrhagia. In the one the discharge is odorless; in the other it is often offensive. In the one the growths are of a pale pink, and firm in consistence; in the other they are grayish-white, amorphous, and very friable. In the one there is no infiltration of the surrounding tissue; in the other there is marked infiltration and the surrounding mucous membrane is destroyed. In the one the pathological changes are confined exclusively to the mucous membrane; in the other they involve the body of the uterus also.

The treatment of the fungous growths themselves is very simple, consisting merely of their removal from the endometrium by means of the curette. The treatment of the condition which gives rise to them, however, is generally a more difficult matter, and on the success of this depends the prospect of a return of the fungosities. In his own experience he had never found it necessary to produce dilatation of the cervical canal before using the curette, as the mouth of the uterus was always sufficiently patulous for the purpose. He thought it better to etherize the patient, as the growth can be more thoroughly and satisfactorily removed when this was done. Sim's speculum is placed in the vagina, and the instrument employed is the Thomas blunt copper wire curette. After the curetting Churchill's tincture of iodine is thoroughly applied to the whole endometrium, and a light tampon having been inserted, the patient is put to bed for two days.

The use of the curette has an excellent effect on the congested mucous membrane of the cavity of the uterus, even when no fungosities are present. The contra-indications for resorting to the curette are recent pelvic inflammation or the existence of any degree of parametritis. Récamier's original curette was undoubtedly a cutting instrument. It has recently been claimed in England that it is blunt; but there is in reality no evidence that such is the case.

Both Sims' and Simon's curettes are also cutting steel instruments. In the curette of Dr. Thomas, which he devised about 1870, the bluntness is the important factor, and it was

the first one of the kind. Two sizes of the instrument are used. Emmet's curette-forceps is an entirely different instrument. The blunt curette is perfectly safe, and, as it is thoroughly efficacious in removing fungous growths, he thinks that it is greatly to be preferred in this class of cases.

In the course of the discussion,

Dr. W. Gill Wylie said that the pathology of the affection had been well stated, and that he was willing to accept the greater part of the paper, though he would object to Dr. Hunter's treatment in some respects. He agreed with him in the statement that the use of the curette was seldom followed by hemorrhage; and he was, therefore, somewhat surprised when he heard him say that he was in the habit of employing a light tampon after curetting. For himself, he never used a tampon if he could possibly avoid it, because he considers it a violation of one of the first laws of surgery—thorough drainage. Even in cases of cancer, he prefers to stop hemorrhage in some other way. If the circular artery had been injured he would twist it with a silver wire, and under any circumstances would apply lint and cold water, styptics or pure carbolic acid, and even wait an hour before resorting to the tampon. Before antiseptics were used it was well known how offensive the tampon became, and although this may to a great extent be avoided by the use of the bichloride of mercury and iodoform, he believes there is always a liability of irritating fluid being forced up into the Fallopian tubes. He is in the habit of practising dilatation in all cases, and principally for the purpose of securing more proper drainage. In addition, though the os were quite patulous, there is always danger of injuring the cervical tissue with the curette unless further dilatation is made. He is, of course, strongly opposed to the use of sponge tents on account of the danger of septic absorption, and always uses Sims' steel dilators. He also uses Sims' steel curette, and in regard to this instrument he thought great injustice had been done Dr. Sims. The so-called sharp Sims' curette is not in reality a sharp curette, although it is true that it is made of steel. At first it was made with a flexible shank, but afterwards it was found

advisable to have it constructed with an univeral curve. If a tenaculum is employed in connection with the curette, any uterus can be straightened to such an extent as to admit of having the instrument satisfactorily applied to every portion of its cavity. The advantage of the steel curette over the dull copper one is, that it does the work desired more thoroughly, while at the same time it does not injure the normal tissue. In many cases he believes that the dull curette is not sufficient, because it cannot remove the fungosities perfectly. Sarcoma could also be removed very thoroughly with the steel instrument.

Dr. P. F. Mundé said that since his paper, read seven years ago before the Edinburgh Obstetrical Society, to which Dr. Hunter had alluded, had been written, cases of sarcoma have accumulated; the disease having of late become much better known than formerly. He thought that Dr. Hunter ought to have given attention to the influence of laceration of the cervix upon the causation of endometritis fungosa. He believed that it constitutes a very important element in the etiology. This is the first link in the pathological chain which finally results in the fungous growths in the cavity of the uterus; and in restoring the organ to its normal condition it is inconsistent in the gynecologist to proceed in an inverse order. The first thing to do is to scrape away all the fungosities with the curette, and the next to apply strong tincture of iodine thoroughly to the inflamed endometrium; after which, if he repaired the laceration of the cervix there would be little danger of a return of the trouble.

In regard to the after-treatment, he disagreed with Dr. Wylie and accepted the position of Dr. Hunter. When there is subinvolution there is very apt to be pretty free hemorrhage, and he is often glad to plug both the uterus and the vagina. He does not believe it a good plan to curette a patient except at her own home and under the influence of an anæsthetic, and does not think it is safe to leave the house without having placed a tampon in position. After using the curette he makes an application of either tincture of iodine or of a mixture of

equal parts of solution of persulphate of iron and glycerine, after which he places a tampon in the vagina. He regards this procedure in the light of an operation, and always calls within 48 hours to remove the tampon. Applications of iodine to the endometrium ought to be made twice a week at first, and later once a week; and he regards it as very important that the after-treatment be maintained for a sufficient length of time.

Dr. C. C. Lee said he concurred, in the main, in the views expressed by Dr. Hunter. In regard to the symptomatology, however, he thought that the condition was not necessarily characterized by menorrhagia. Metrorrhagia, he believed, is a well-marked symptom in quite a large minority of typical cases; the condition of the uterus being, as a rule, one of general passive congestion. In treating endometritis fungosa he always prepares the case carefully before operating, and when using the curette prefers to give ether. In the choice of instruments he has no hesitation in declaring himself strongly in favor of the blunt curette, as he believes the sharp curette quite as likely to do injury as good, even when employed by the most skilful hand. One of the worst cases of pelvic peritonitis, which he had ever seen, had been directly caused by the employment of the sharp curette by a gynecologist of high reputation.

He does not find it necessary to practise dilatation, as the cervical canal is always sufficiently patulous in these cases. He makes it a rule always to wash out the cavity of the uterus, both before and immediately after using the curette, with a weak carbolic acid solution. In addition, after curetting he applies a solution of strong tincture of iodine to which is added a small quantity of chromic acid, and he had found that this combination has a much more permanent effect upon the uterine mucous membrane than any other with which he is acquainted. One part of saturated solution of chromic acid is added to four parts each of alcohol and tincture of iodine. He objected to persulphate of iron on account of the hard coagula which result from its use. The Thomas curette is the one he always employs.

Dr. B. F. Dawson expressed himself as being heartily in accord with the sentiments of the author of the paper. The

mildness of the dull curette constitutes its great advantage. Dr. Mundé had said that if he is unable to extract any granulations from the cavity of the uterus with the blunt curette, he does not use the sharp instrument; and if such be the case, he could not see why he should ever use the sharp one at all. Only recently he had seen a very aggravated case of pelvis cellulitis which followed the application of the sharp curette. He did not think it necessary to practice dilatation, because the whole cavity of the uterus is enlarged by the growth. Uterine catarrh is a constant concomitant of the condition of fungous granulations, and whenever uterine catarrh exists there is sure to be a patulous os. He thought that ferocity was too apt to characterize the modern gynecologist.

Dr. Hunter brought the discussion to a close. He said he is in the habit of using a light tampon for antiseptic purposes, and that he had not, like Dr. Mundé, found it necessary to employ it for the controlling of severe hemorrhage. Unlike Dr. Wylie, he does not believe it necessary to dilate the cervix, and this dilatation, he thought, is much more likely to do injury than the use of the curette without dilatation. He had been personally taught the use of the Sims' curette by Dr. Sims himself, so that he is well acquainted with the instrument. He had mentioned laceration of the cervix as one of the causes of endometritis fungosa; but as it was not his intention to make his paper an exhaustive one, he had not had time to dwell upon it at length. When there is very great hemorrhage following the use of the curette in any case, he was inclined to think that it is due to the fact that all the growth has not been removed. Like Drs. Lee and Dawson, he also had some instances in which serious consequences had resulted from the use of the sharp curette, and, at the present time, he is treating such a case in which the instrument had been handled by a skilful operator. The blunt curette should always be employed, he believed, in the condition in question; though the sharp curette also has its use, as, for instance, in the removal of carcinoma.—*Medical News*, *April* 25, 1885.

At a meeting of the Chicago Gynæcological Society, held on March 20th, 1885, Dr. J. Suydam Knox read a paper entitled

"*Influence of Cimicifuga Racemosa upon Parturition.*" After a resumé of the medical history of the drug, Dr. Knox gave the results of his clinical observations in 150 cases of labor—57 primiparæ and 93 multiparæ—in which black cohosh had been exhibited. The average duration of the first and second stages of labor, in normal cases, in primiparæ, was seventeen and three hours respectively. Under the influence of black cohosh, the duration of the first and second stages of labor, in the 57 cases observed, was 6¼ and 1¾ hours respectively. The average duration of the first and second stages, in normal cases, in multiparæ, was 12 and 1 hours respectively. Under the influence of black cohosh, in the 93 cases observed, the average duration of the first and second stages was 3 hours and 27 minutes respectively. From these clinical observations he drew the following conclusions:

1. Cimicifuga has a positive sedative effect upon the parturient woman, quieting reflex irritability—nausea, pruritus and insomnia, so common in the last six weeks of pregnancy, are always rendered less distressing, and often disappear under its administration.

2. Cimicifuga has a positive antispasmodic effect upon the parturient woman. The neuralgic cramps and irregular pains of the first stage of labor are ameliorated, and often altogether abolished. In fact, during the first indiscriminate use of the drug in all cases I had the mortification, with a few women, of terminating the labor so precipitately, and without prodromic symptoms, as to be unable to reach the bedside before the birth.

3. Cimicifuga relaxes uterine muscular fibre, and the soft parts of the parturient canal, by controlling muscular irritability, thus facilitating labor and diminishing risks of laceration.

4 Cimicifuga increases the energy and rhythm of the pains in the second stage of labor.

5. It is my belief that cimicifuga, like ergot, maintains a better contraction of the uterus after delivery.

It is my habit, however, to administer from 15 to 30 minims of the fluid extract of ergot after the birth of the fœtal head, and I have had but few opportunities of testing this effect of the cohosh. My method of administration has been to give 15 minims of the fluid extract of cimicifuga in compound syrup of sarsa-

parilla each night for four weeks before the expected confinement. One fluidounce of the fluid extract of cimicifuga to three fluidounces of compound syrup of sarsaparilla—dose, one teaspoonful—makes just the required quantity.—*Med. News*, April 11,'85.

The Bichloride of Mercury Douche in Obstetrics.—There seems little doubt of the great efficacy of perchloride of mercury as a germicide and antiseptic, but there is also little doubt that it is a dangerous remedy. The *New York Medical Record* reports that Dr. Hurlbert of St. Louis stated at a meeting of the St. Louis Medical Society that he had salivated five patients with a bichloride solution (1 to 3000) given as a vaginal douche twice a day. No particulars are given.

On the 6th of last March, Dr. George Peabody read a paper before the Practitioner's Society of New York City on "Toxic Enteritis caused by corrosive sublimate as a surgical application."

Dr. Peabody's attention having been directed to the subject by reading reports of certain cases of this kind in German medical journals, he and Dr. Stevens searched the records of the New York Hospital for the previous 18 months. Accounts were discovered of eleven cases in which the use of the poison as an antiseptic dressing or application was followed by obstinate diarrhœa, which did not yield to the usual remedies, and which sometimes ceased on the drug being discontinued, but which in seven cases was followed by frequent bloody discharges, griping, tenesmus, prostration and death. In three of these seven cases autopsies were made, and in each, extensive diphtheritic inflammation of the large intestine was found.

Not long ago Prof. Stadtfeldt, of Copenhagen, reported a fatal case of sublimate poisoning in the *Cent. für Gyn.* It was a case of retained placenta, and after its manual removal the uterine cavity was douched with a solution of 1–1500. During the administration of the douche the patient suddenly went into collapse, from which she recovered, but diarrhœa and tenesmus with bloody stools set in, and with these symptoms she died in ten days.

Schede, of Hamburg, reports seven other fatal cases with destruction of mucosa of the large bowel. In three of the cases reported by Dr. Peabody an autopsy was made, and the

large intestine was in a condition of extensive diphtheritic inflammation. These facts convey a serious charge against this remedy, and for obstetric practice would at least seem to justify its use being limited to vaginal irrigation.—*New York Medical Record.*

Thirteen Cases of Hysterectomy, with Remarks on Carbolic Spray in Abdominal Surgery.—This is the title of a paper by Dr. Thomas Keith, of Edinburgh, in the *British Medical Journal* for January 31, 1885. Dr. Keith had previously reported 25 such cases. The 13 here reported were operated on during 1884. Of 13 only one died. Besides these during the same year, the ovaries were removed 12 times by Dr. Keith for bleeding fibroids. In all of these 12 cases more or less benefit resulted. This makes 50 uterine tumors—the whole number with which Dr. Keith has ever interfered by abdominal section. Dr. Keith goes on to remark with some pride, but also with characteristic modesty: "So far as I am aware, the results of these supra-vaginal hysterectomies are the best that have yet been obtained; and as these are my first cases of this operation, it is only reasonable to suppose that the mortality will become lower by a longer experience. It seems to me that the reason of this comparative success lies in the fact that no operation was done unless there appeared to be some strong necessity for the doing of it. The tumors were generally large, the patients had suffered, and were more or less broken down by pain and hæmorrhages. No one was operated on in good health or in good condition. No case of pediculated tumor was ever meddled with, simply because I do do not consider that operations are necessary for such cases. Almost all were done on account of repeated hæmorrhages and ruined health. The time chosen for operation in the feeble—and most of them were feeble—was a day or two before menstruation was expected. The tumor might perhaps be then at its largest, but the patient had regained more or less force from the losses of the previous period." In discussing the method of dealing with the attachments of such tumors, Dr. Keith says there is no one way of doing this. Each case must be a law to itself. "A few of the simpler cases may be treated entirely

extraperitoneally. Generally the broad ligaments must be left inside; and sometimes the whole attachment, when there is much enucleation, must be so treated. Sometimes the treatment may be entirely intraperitoneal by means of Koeberle's serre-noeud, or it may be left intra- and half extra-peritoneal. I am hopeful that the cautery will yet be the best and safest of all the methods of dealing with some of these tumors. The more I use it in ovariotomy, the more I like it. It is simply perfect, and its employment seems to me to be 'a higher exercise of our art' than the ligature, which, apart from the chances of hæmorrhage, embraces ten times the amount of tissue that is really necessary. That a more perfect way will soon be found I have little doubt." Dr. Keith again asserts his unbelief in the use, or rather his belief in the danger of the carbolic spray in abdominal surgery. It is a strong argument when he says: "If Mr. Thornton gets a fatal result in every third case where he removes a uterine fibroid with his complete and perfect Listerism, spray and all the rest of it, am I to go back to these ways when I get one out of 16 without them? By no means. The antiseptic principle, which I believe in as much as anyone, can be carried out by simpler means than these; and, for myself, I have almost gone back to the boiled water and soda of 20 years ago. It is, unfortunately, a sad fact that, ever since surgery began, the great evil was done by the surgeon himself. It was the willing and tender, though unclean, hand that carried most of the poison into the wounds. It is to this that Lister has put a stop. With a proper antiseptic, a surgeon is now made to be clean in spite of himself, is compelled to have safe sponges, safe ligatures, clean instruments, and, above all, clean fingers. If one be careful enough—and few are careful enough—one may do all this with boiled water and soda. Some such precautions are essential; beyond these, with ordinary care, we need not disturb ourselves much as to what is in the air. Yet it was a pleasant doctrine to believe in, to put the whole blame of a bad result upon some indefinite unknown something in the air—something beyond ourselves. It was no fault of ours; it could not have been helped. Every thing was done that could have been done. I fear we are all

apt to blame place, persons, things, accidents, circumstances,—anything you like under the sun—rather than ourselves." In view of such results, comment could but mar the effect of such words from this great and good man.

Abdominal Section in Ruptured Tubal Pregnancy.—Mr. Lawson Tait has been following up this method of treatment, and in the *British Medical Journal* for April, 1885, reports three new cases, making in all nine he has thus treated, with only one death. The operations were all done at the time of rupture. In all, a large quantity of clot and serum were found in the cavity. After the removal of the ruptured tube, the pelvis was drained.

Correspondence.

BERLIN, April 16, 1885.

To the Editor of the CANADA MEDICAL & SURGICAL JOURNAL.

The past has been a stirring week here in surgical circles. The German surgical congress held its sitting here from April 8th to 11th. There were two sittings each day. Many papers were read and discussed ; but the principal feature of the session was the number of valuable preparations and ingenious instruments exhibited, and the great number of patients shown on whom operations had been performed. The renowned and world-wide famed Langenbeck presided at all the sittings. He is a rather spare, tall man, erect in bearing, and with a mild, benevolent cast of features, which look particularly pleasing under a firm head of silvery white hair. In appearance, as well as in manners, he is most gentlemanly and refined. He listened attentively to the reading of the papers and the discussions that followed, and was most attentive when some young surgeon criticised the "Langenbeckische methode," or offered some improvement upon it. Forming a striking contrast to him in every respect was the not much less renowned Volkmann, who is of middle stature, broad shouldered, has a large head, covered with long reddish hair, a massive brow with heavy bushy eyebrows, and a cast of features which are easily set in motion. He fanned the life of the meetings. If an unfortunate speaker made a miss, Volkmann was

certain to convert it into a jest that would make the audience roar with laughter ; and if some young surgeon, with the excitement of the moment, would make a sweeping assertion, Volkmann would let fly a biting sarcasm that would make the poor fellow wish himself on the banks of the Congo. This he carried at times to unjustifiable length, and made not a few enemies by his indiscreet and rather arbitrary remarks.

We had a good illustration the other day at Dr. Martin's clinic of the difficulties that oft beset the gynæcologist in diagnosis. A married woman, mother of two children, youngest 16 months old, came complaining of metrorrhagia for the past four months, and during the last six weeks there had been an almost constant loss of blood. On examination, a tumor, the size of a child's head, was found occupying the pelvis, and something was felt passing off from the left of the tissues which was thought to be the uterus. She was narcotized the day after, and thoroughly examined. Dr. Martin now considered he had to deal with an ovarian tumor, probably cystic. After the lapse of a few days, she was again put on the table, narcotized, for the purpose of scraping out the uterus to arrest the metrorrhagia. Now the true nature of the cause was discovered. A septum was found dividing the uterus into two halves, and conception had taken place in the right half, probably about twelve weeks before. The cervix was slit up, the products of conception removed, and the patient has made a good recovery.

During the same week we had another case of abnormality of the generative organs at the clinic. Nature had provided this patient with a double set of organs. She had two uteri, two cervices, and two vaginæ. She was a spinster, aged 35, of decidedly masculine build and features. Her history was rather a sad one. She had come to Dr. Martin about 18 months before to know if she might marry with her abnormal organs. Dr. M. said she might, but she ought to tell her lover of the state of things. She did, and lost her lover. She now came to be treated for a uterine catarrh, giving the above history, and added that another suitor for her hand had recently come on the scene. She was in a dilemma as to what course to pursue. She feared

if she revealed her condition to this one he would treat her as the first had. She asked some very pertinent questions: that if she were to marry, might she not conceive in both uteri at different periods, and, perhaps, have two confinements in one month. Dr. M. replied positively, *No*, and said that as yet there is not an authentic case in which conception had taken place during pregnancy.

In writing of the Moabite Hospital in my last, I fear I used an expression that may have caused an erroneous impression. It is not built on the pavilion plan, as that is commonly understood, but on the barrack system. The buildings (24 in number) are low, one-storied frame structures, filled in with bricks and boarded on the inside. The grounds comprise fully 18 acres, being about six acres long and three wide, and the buildings are placed along the four sides of the inclosure, at regular and considerable distances apart. Between the back of the buildings and the inclosing wall is quite a strip of land; in front runs a wide gravelled road the whole way round, and the area of ground bounded by the road is beautifully laid out into lawns and parterres, with clumps of shrubbery interspersed here and there. At the north-east corners of the grounds exist several small gardens, one for each of the assistants, druggists, and other officers. Two flower-houses of considerable dimensions, where a great variety of flowers are constantly cultivated, supply all the wards the whole year with green plants. On entering, on the left is the porter's lodge; a little further on is a commodious ice-house. On the right is a good-sized building for the officers, then comes the engine-house which supplies the heat and locomotive power for the whole hospital. The heated steam is conveyed by one large pipe running under ground, from which two smaller pipes go to each building. The kitchen, which is close by, is a model of cleanliness and order, and looks very inviting. All the cooking is done by steam, and a large "Beker's patent" turns out the roasts in appearance and taste all that the eye and sense of taste could desire. In the laundry, a few steps further on, the most ingenious machinery is to be seen, which effects everything, from the simple washing to ironing and folding of the

clothes. There is a building apart for the disinfection of clothes and furniture. In it are two immense ovens, with places for hanging up clothes, in which a moist heat of 122°C. is maintained. This degree of heat *with moisture* has, by experiments, proved to be inimical to the life of micro-organisms. The ventilation of the wards is very thorough. In addition to the two large doors at either end, open spaces, covered in, exist in the centre of the roof, and fresh air is introduced through several perforated zinc plates about a foot from the floor. These are so placed that the air strikes against the heating pipes and is thus warmed before circulating through the room. Dr. Guttman was asked one day what cubic space was allowed each patient. He said "that is a question we need not answer here, for these are 'garden houses' and not hospitals." As one stood in the aisle, with beautiful green lawns in view in every direction, the window-sills filled with flowers in bloom, a sweet fragrance pervading, the swallows flying in and out through the open spaces in the roof, one forgot he was in an asylum for disease, and did not consider, at the time, Dr. Guttman's remark a mere figure of speech. The beauty of this system, apart from the many striking ones that it possesses, is that as the city grows the hospital can be removed to freer quarters, and the cost of removal will be more than compensated by the difference in price of the respective grounds.

H. N. V.

Reviews and Notices of Books.

The Therapeutics of the Respiratory Passages.—By PROSSER JAMES, M.D., Lecturer on Materia Medica and Therapeutics at the London Hospital Medical College, Physician to the Hospital for Diseases of the Throat and Chest, etc. New York: Wm. Wood & Co.

The methods of treating the numerous affections of the respiratory tract has become by modern usage so diversified that a volume can well be afforded for their consideration, nor could any one better qualified than Dr. James be selected to carry out this object. His numerous writings upon the affections of the throat are familiar to all. Twenty chapters are devoted to

discussing in detail all the most approved modes of managing the local affections of the respiratory passages as well as those traceable to constitutional conditions. It is needless to enter into a more detailed description of the contents. Suffice it to say that it is complete and highly instructive. To the specialist it is of value as conveying the views of one of some eminence in his department, and to the general practitioner it will form a safe guide in the management of diseases he is often called upon to meet and to combat which often requires all his skill.

Insanity and Allied Neuroses.—By Geo. H. Savage, M.D., M.R.C.P. Philadelphia: H. C. Lea's Son & Co.

This little book is perhaps the most readable one that has been published for some years on the above subject. Whilst reading the first few pages, the question is almost certain to arise in the reader's mind as to how far he may be removed from the "borderland" of insanity. It may so happen that up to the time of reading these pages, in some respects at any rate, he considers himself a genius. It is more than likely he will disclaim any such position when he reads that "genius is looked for as the necessary accompaniment of eccentricity," and further, "Eccentric people may belong to two classes at least—those who have some insane inheritance, and those who are passing from insanity into some form of mental disorder." Again, "Want of balance fairly describes the mental condition of many a genius." It may be interesting reading to some who will never pass a pin or horseshoe without picking it up, and find that these "eccentricities" are worthy of discussion in connection with the subject of insanity.

In considering the causes of insanity, the author very justly remarks that "true education—that is, true development of mind and body—are the best preventives of insanity." He does not at all incline to the view of so-called over-education accounting for its apparent increase. Overwork he considers likely to be followed by evil results only when in direct opposition to the tastes, and under bad hygienic conditions. "Work of a monotonous character," he says, "is injurious, and assists in producing mental disorder."

The author draws attention to a point that is well worthy of consideration in the treatment of young maniacal patients. Many of these cases recover, but when associated in asylums with older lunatics there is very great danger of their contamination ; and although apparently quite recovered, they are very likely to have acquired some of the evil habits of their older associates and subsequently to become criminal.

The chapter on Delusional Insanity is full of interest, and shews that these patients are quite up to the scientific progress of the age, many of them having the telephone and microphone associated with their delusions.

The easy, conversational style adopted throughout the entire work renders it one that can be read by the student or practitioner without any apparent effort, which is required in most books on this subject. The few plates that are given are remarkably good, and very suggestive of the conditions described.

We think this work is the best yet published for students' use, and one which should be in the hands of every medical student.

Cocaine, and Its Use in Ophthalmic and General Surgery.—By H. KNAPP, M.D., Professor of Ophthalmology in the Medical Department of the University of the City of New York. With Supplementary Contributions by Drs. F. H. Burworth, R. J. Hall, E. L. Keyes, H. Knapp and W. M. Polk. New York: G. P. Putnam's Sons.

The author of this compilation has brought together into one small volume the results of the observations of a number of experienced surgeons and physicians as to the value of this modern anæsthetic. The drug, since its first introduction only a few months ago, has risen rapidly into favor, and the sphere of its usefulness has been almost daily extended. No doubt it will take further time to determine the limits of its successful application and the objectionable features it may prove to possess. Dr. Knapp tries to show how, at any rate, these points have been eliminated up to the present day. Considering the

mass of material which has found its way into our current literature upon the subject, many no doubt will consider it a boon that some one has undertaken to furnish us with the pith of all this in a condensed shape. As every one is bound to know all about cocaine, every one cannot do better than possess himself of Dr. Knapp's *brochure.*

The Year-Book of Treatment for 1884: A Critical Review for Practitioners of Medicine and Surgery. Philadelphia: Lea Brothers & Co.

This publication is divided into a large number of separate chapters, each one dealing with a special department of medicine or surgery, and written by an author (English) fully conversant with the subject in hand. Articles from all countries are laid under contribution, and every observation of marked importance bearing upon therapeutics is included. The writer also embodies a general review of the advances that have been made during the year in each particular branch, so that a complete *rseumé* can thus be obtained at a glance. The names of the various authors guarantee the value of the work done and the thoroughness of the researches. It is a valuable book for every physician, and one to which constant reference can be made with useful results.

Books and Pamphlets Received.

The Oleates: An Investigation into their Nature and Action. By John V. Shoemaker. Philadelphia, F. A. Davis.

Clinical Lectures on Scrofulous Neck. By T. Clifford Abbott, M.A., M.D., &c. And on The Surgery of Scrofulous Glands. By T. Pridgin Teale, M.A., M.B. London, J. & A. Churchill.

Handbook of Diseases of the Skin. Edited by H. von Ziemssen, M.D. Illustrated. New York, Wm. Wood & Co.

Aneurisms of the Aorta, with especial reference to their position, direction and effects. By Oswald Browne, M.A., M.B. London, H. K. Lewis.

Transactions of the New York State Medical Association. Vol. I. Edited for the Association. By Austin Flint, Jr., M.D. New York, D. Appleton & Co.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, March 6th, 1885.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Congenital Looseness of all the Joints.—The PRESIDENT exhibited a girl aged 4 years presenting this condition and allowing of the production of partial dislocation of all the larger joints. Talipes of the feet could also be simulated.

Decidual Cast of the Uterus.—DR. ALLOWAY exhibited a very perfect decidual cast of the uterus at the end of the sixth week of gestation.

Neuroma.—The PRESIDENT shewed a neuroma dissected from an amputated stump.

DR. HINGSTON said he believed that the bulbous end of a nerve was a frequent cause of pain in the stump, and related a case in illustration.

Case of Pulsating Empyema.—DR. GEO. ROSS read a paper on this case. (*See page* 606.)

DR. HINGSTON said that when a student, in 1851, at the General Hospital, he saw a case of pulsating empyema, accompanied with metallic tinkling synchronous with the pulse, and evident at the surface of the back. The late Dr. Holmes, then clinical teacher, said at the time that it was the first case of the kind he had ever seen.

DR. GEO. ROSS did not see how you could possibly have pulsation communicated through the fluid in a case of pyo-pneuthorax. The physical conditions which would cause amphoric phenomena would prevent pulsation being observed. To observe the latter, the sac must contain fluid alone.

Cases in Practice.—DR. SHEPHERD related the peculiar abnormalities seen by him lately in a healthy young man aged 22, who has transposition of the viscera of the chest and abdomen. The right testicle hangs lower than the left.

Stated Meeting, March 20th, 1885.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

DR. A. L. SMITH shewed the following cases of skin diseases: 1st, *Tinea Tonsurans* in a state of kerion, the ulcerating patch being about 3½ inches in diameter. 2nd, *Specific Lupus of the face;* the patient, a woman, was doing well under applications

of acid nitrate of mercury. 3rd, *Specific ulceration* on the leg of the last patient's husband. 4th, *Tinea Versicolor* over the chest of a delicate young woman.

Case of Abdominal Section.—Dr. Trenholme, who performed the operation, said this case was of some interest, inasmuch as a definite diagnosis was not only impossible before the operation, but the portions of the tumor removed, and now before the Society, have not yet been definitely determined as to whether they are the remnants of an extra-uterine fœtation or of a dermoid cyst. A report upon their character will be brought before the Society at a subsequent meeting. The following are brief notes of the case :—

The patient, Mrs. O., of Ontario, a well-developed, fleshy woman, 46 years old, was married 31 years ; no children. One abortion 25 years ago. For nine years after abortion, suffered at menstruation. Twelve years ago had inflammation of the bowels. Ten years ago had another attack of a similar character. After this, enjoyed fair health till change of life occurred, seven years ago. Since this last period, was pretty well up to October last, when she had what was supposed to be inflammation of the bowels. Her health from this time onward not good, when, about the beginning of the present year, she was again taken ill with very severe inflammation of bowels, though, she said, the disease seemed lower down in her body, accompanied with a good deal of irritation of the bladder and decrease of quantity of urine. Menstruation returned again last fall, but was scanty and at irregular intervals also, frequently accompanied by severe pains. *Present state.*—Debilitated appearance, pasty color ; irritable stomach ; scanty urine (2 or 3 ozs.), high-colored, no albumen ; bowels regular ; pulse weak (shabby) and rapid. Tumor felt over hypogastrium ; per vaginam, tumor over brim of pelvis, larger than a fœtal head. Uterus $2\frac{1}{4}$ in., and carried upward and backward. Tumor and uterus found closely united, but thought moveable. Diagnosis, fibro-cystic tumor of uterus most favored, but held to possibility of tumor being ovarian. *Operation.*—Assisted by Drs. Hingston, Kennedy, Perrigo, and Armstrong, made usual exploratory incision, and found no walls to cyst. Removed three gals. of fluid, and then found the debris of a dead fœtus, which, with the placental debris, was scooped out with the hand. No ligatures were required to arrest bleeding, which was very slight. Abdominal cavity was well cleaned and washed out. Uterus and ovaries were normal. *Result.*—Patient never overcame the shock, and died twenty-two hours after operation. No post-mortem was permitted.

In reply to questions, Dr. Trenholme said the woman's history did not indicate pregnancy, and that before operating her temperature was normal.

Several members who examined the debris gave it as their opinion that there were no fœtal structures present. The bony piece was thought to be part of an ossified cyst wall. There was no sign of any of the long bones.

Sarcoma of the Testis.—The President exhibited the specimen and related the following history of the case: Patient, aged 48, had an attack of orchitis first in September, 1883; no cause could be assigned for this. He rode much on horseback in the woods, but there was no history of injury. In July '84, he had another attack of inflammation in that testicle, which did not reduce in size. Last October it became very bulky. There was no disease in the cord. He was anæmic. No history of syphilis. Had had gonorrhœa ten years ago. Iodide of potassium and mercury was given for a month. After this, Dr. Bell attended him through an attack of phlebitis of the left leg. Sarcoma of the right testicle was diagnosed. Dr. Roddick removed it, and a microscopic examination revealed it to be of the large round-celled variety of sarcoma. The tumor was as large as the fist. Slides prepared by Dr. Wilkins were shown under the microscope.

Large Intra-uterine Myoma.—Dr. Wm. Gardner exhibited the specimen and related the case. Patient, aged 42, very pale, came to him with a history of severe hemorrhages for the past two or three years. No pain. An examination caused a great hemorrhage. The tumor could easily be felt in the hypogastrium, and by the vagina, in the uterus. After dilating well with tents, it was removed in pieces by means of the spoon saw. The operation lasted an hour and a half. Not more than five or six ounces of blood was lost. A good many shreds came away after. The uterus was thoroughly irrigated and drained with the double tubes. These were sutured to the lips so as to keep them in place. After eight days they ulcerated away, and were allowed to remain out for 24 hours, when the temperature rose to 101½°. The os was then opened, and three or four ounces of bloody fluid escaped. The tubes were again used as before. The patient made a good recovery. Dr. Gardner said that the irrigation was troublesome, but on it rests the success of the operation. Lawson Tait has lost 50 per cent. of these cases.

Dr. Trenholme said he had removed several of these tumors and never lost a case.

Dr. Smith asked if ergot had been given in this case for a long time as recommended.

Dr. Gardner replied that the patient's history and blanched condition indicated immediate operation. Ergot could not be depended upon, and, besides, the woman was poor and could not afford to lie up.

The President thought the woman's condition justified operative interference.

Removal of a Uterine Myoma with the Cephalotribe.—Dr. Hingston said that two weeks ago a lady came to him from the country suffering greatly from a large uterine myoma, which did not cause hemorrhage. The tumor was about the size of an infant's head, and sessile. He had seen Sir James Simpson use the cephalotribe in a similar case, so thought he would try it here. One blade was easily entered, but much coaxing was required to get in the other. A good bite was secured, and the screw applied. In this way one-half came away. Again the blades were applied, and half the remainder came away. Now the uterus was drawn down and out, and the rest of the tumor shelled out with the fingers. Patient made a good recovery. Injections of Condy's fluid were used.

Dr. Gardner said he believed the vulsellum and spoon were the best instruments to use in these cases.

Dr. Trenholme remarked that both in this case and Dr. Gardner's an incision through the mucous membrane covering the tumor might have been all that was needed, as this simple operation has at times relieved pain and arrested hemorrhage.

Dr. Shepherd read a paper on "*The Musculus Sternalis and its occurrence in Anencephalous Monsters.*" He stated that the musculus sternalis was a supernumerary muscle which has always excited a great deal of interest among anatomists, and that its proper morphological significance was not yet fully determined. It was seen in about three or four per cent. of ordinary individuals, and its fibres generally ran at right angles and superficial to the great pectoral. It was often bilateral but most frequently unilateral, and was subject to many variations. Frequently it had no attachment to bone, but lay superficial to the great pectoral and was attached at either end to fascia. It often was inserted into the costal cartilages. It might be continuous above with the sternal origin of the sterno-mastoid, and below with the fascia of the external abdominal oblique. Again, it might be continuous with the pectoralis major, and be associated with deficiency of that muscle. It

was often of small size, but occasionally it was quite a strong muscle, and could be seen under the skin in the living. Dr. Shepherd had seen it measuring five inches long, two and a half inches broad, and two and a half inches thick. For years it was considered to be a remnant of the rectus abdominis, which in many animals extends from the pubis to the top of the sternum, and was called the *sternalis brutorum*. This view had long ago been given up because the rectus abdominis lies in a plane deeper than the great pectoral, and is never superficial to it. Bourienne many years ago held that it was a prolongation downwards of the sterno-mastoid, a view still held by Henle and others. Hallett and Wilde regarded it as belonging to the same group of muscles as the platysma, and Prof. Turner, of Edinburgh, considered it to be one of the representatives in man of the great panniculus group which exists in most mammals. Darwin also held this view in his work on the *Descent of Man*, after referring to the views of Prof. Halbertsma, M. Testut and Prof. Bardeleben.

Dr. Shepherd stated that Prof. Cunningham, of Dublin, has lately in five cases traced the nerve supply of the musculus sternalis to the anterior thoracic nerve, and that he, believing that the nerve supply was the best indication for the proper classification of muscles, considered that the musculus sternalis belonged to the pectoral group. Prof. Cunningham also suggested that this was a new inspiratory muscle appearing in man, and that it was his impression that it occurred more frequently in females, due possibly to costal inspiration being more pronounced in them. Mr. Abraham, of Dublin, first pointed out, last year, that this muscle was very common in anencephalous monsters, as he had found it in six out of eleven specimens examined. Mr. Abraham looked upon it as probably an aberrant portion of the great pectoral muscle.

Dr. Shepherd said that he had examined six anencephalous monsters which were in the museum of the Medical School of McGill University, and wished to place the results of his dissection before the Society. In each monster he had found a well-developed musculus sternalis. In three the muscle was double ; in two continuous above with the sterno-mastoid, and in several it arose from the manubrium sterni and was inserted into the costal cartilages. In all the cases there was a deficiency of the great pectoral muscle on the side where the supernumerary muscle was found, the abnormal muscle apparently taking the place of the absent portion of the pectoral. In several the muscle was of large size, and in part continuous

with the fibres of the great pectoral. Nine muscles, in all, were found in six monsters, as three had double muscles. Dr. Shepherd had successfully traced the nerve supply of these muscles in all but two—that is, seven of the muscles were supplied by the anterior thoracic nerve; the nerve entered the muscle in its deep surface and could be traced back over the lesser pectoral through the costo-coracoid membrane to the internal anterior thoracic nerve.

Dr. Shepherd remarked that it was a curious fact that this muscle should be supplied by a nerve which is at so great a distance from it, and not by the intercostal nerve, which in several cases pierced the abnormal muscle without giving any branches to it. He also stated that he had formerly held that the *musculus sternalis* belonged to the panniculus group, but that these dissections had caused him to alter entirely his previous views as to its homology, and that now he had little doubt that this muscle belonged to the pectoral group because: 1. Its nerve supply. 2. When present the great pectoral is generally deficient. 3. Its continuity in many cases with the great pectoral. 4. That it was in the same muscular plane as the great pectoral. Dr. Shepherd said that it was his belief that the nerve supply was the best guide we possessed for determining the homology of a muscle.

Dr. Shepherd was unable to explain why this muscle should be so common in anencephalous monsters, except that in these undeveloped beings there was a greater tendency to revert to previous conditions; but he said it was difficult to reconcile the fact that this muscle was an aberrant portion of the great pectoral and a reversion to some preëxisting muscle, as no known existing arrangement of the pectoral group in the lower animals at all resembles the condition found in these monsters. He also stated that if this muscle was an aberrant portion of the great pectoral which had no animal representative, then Prof. Cunningham's theory that it was a new muscle appearing in man had some degree of probability. Dr. Shepherd said he was not prepared to accept this explanation, but awaited further light and further knowledge of comparative anatomy before pronouncing definitely on the morphological significance of the musculus sternalis.

After the reading of the paper, the specimens were exhibited to the Society.

Dr. Henry Howard said that Dr. Shepherd's demonstration was a further proof that man evolved from a lower animal, and did away with the theory of the creation of man as he now is.

CANADA

Medical and Surgical Journal.

MONTREAL, MAY, 1885.

VACCINE AND VACCINATION.

The occurrence of smallpox in this city has naturally redirected attention to the all-important question of vaccination. There can be no question that the subject needs here a great deal of study, and requires other and more complete arrangements to be made in order to secure anything approaching to a satisfactory protection of the citizens. We have learnt with some surprise that, whilst it has been thought that of late years vaccination was being pretty generally practised in all quarters of the city, on enquiry being made at some of our largest institutions for children, by far the greater number of these have never been vaccinated. This applies chiefly to the French-Canadian population who have never quite got over the crusade of the anti-vaccinationists waged some years ago. Now, if the spread of smallpox in our midst is to be arrested—if we are not to become a prey to such frightful epidemics of this disease as we have already suffered from—it must be by the carrying out of systematic vaccination. The objections which were urged against the reception of vaccination at the time we have above alluded to were founded chiefly upon untoward results which were observed in a certain number of persons then subjected to the inoculation. These consisted in badly inflamed arms, severe lymphangitis, sometimes with axillary abscesses, occasionally erysipelas, and multiple subcutaneous abscesses. It was held that these unfortunate effects resulted from the employment of defective humanized lymph—that is, lymph which had by some means become possessed of septic properties. To guard against this, pure bovine virus was obtained from an original case of vaccinia in a heifer, and has been propagated through successive

animals ever since. This source of supply has been largely used by the public vaccinators and the physicians of this city and the Province generally with great satisfaction. Some have used the bovine virus direct, others have prefered the lymph one remove from the animal. It is needless to say that in order to ensure the vaccination of all children and unprotected persons it is necessary not only that the public admit the principle, but that they also have confidence in the purity of the lymph. It is very unfortunate that, just after the outbreak here, doubt was thrown upon the quality of the supply issued by the Board of Health. Bad results were reported from some of the public institutions where children had been vaccinated by the health officers. A few cases of erysipelas and severe local troubles were also heard of from general practitioners. The facts were investigated by the chairman of the Board, together with a few physicians whose co-operation had been requested, and as the conclusion seemed warranted that the lymph must be accused of having in some way conveyed septic matter, it was decided to cease all vaccination until such time as a perfectly pure article from a fresh and thoroughly reliable source can be provided. We commend the prompt action of the Board, and hope that, when the officials resume their good work, they will not be hindered by the unfortunate accident which has led to a certain amount of necessary delay.

PROVINCIAL MEDICAL BOARD.

The semi-annual meeting of the College of Physicians and Surgeons of the Province of Quebec was held at Montreal on the 13th inst. The President, Dr. Lemieux, in the chair. There was a good attendance of governors, among them the Hon. Dr. Robitaille, ex-Lieut.-Governor of Quebec.

Reports from assessors of McGill, Bishop's, Victoria and Laval (Quebec and Montreal), were received and adopted.

The reports from the Board of Preliminary Examiners was read. Sixty-two students presented themselves, of whom 29, who went up for the first time, were successful, 10 who presented for the second time were successful, 17 were rejected on certain branches, while 6 were rejected for general deficiency.

The report of the agent of the College, Mr. Lamirande, was read. During the past six months, the College gained six cases, lost one, and five are still before the Court.

A petition from Mr. Tierney of West Farnham to be allowed to continue to practice medicine, on the ground of his having done so for 25 years, was refused, the College not being possessed of any such power.

A report on certain charges made against the College agent, Mr. Lamirande, was presented. It stated he was not free from blame, had acted beyond the scope of his authority, and recommended that his duties be more clearly defined.

A motion was made by Dr. Durocher, seconded by Dr. Rinfret, suggesting that at the preliminary examination for admission to study, the papers of candidates should not bear the name of the writer, but that of a *nom de plume.*

A report was presented from a committee appointed at last meeting to examine the financial condition of the College. Its consideration was postponed till next meeting.

A notice of motion was given to place the collecting of the annual dues again in the hands of the Registrar, and for this and his duties of registrar pay him $400 a year.

On the report of the committee appointed one year ago to investigate the charges made by Dr. Lachapelle against Victoria College, the consideration of which was postponed from the last meeting, being brought forward, it was moved by Dr. Marsden, seconded by Dr. L. Larue, that the report of the committee be received. This was carried, and there being no discussion thereon, the College proceeded to other business.

A notice of motion authorizing the President in certain cases to issue an interim license was brought forward and carried unanimously. The notice of motion for a Central Examining Board received a six months' hoist.

Montreal General Hospital.—Dr. Jas. Gray has resigned the position of medical superintendent and Dr. Wm. McClure has been appointed his successor. It is thought that the Hospital has secured a very capable and efficient officer. The annual term of service of the resident medical officers expired on the 1st May, and the following gentlemen have been nominated (after special examination) for the coming year, viz., Drs. Finley of Montreal, S. Gustin of London, Ont., and D. W. Eberts of Chatham, Ont. These gentlemen are all graduates of McGill, '85, and have made for themselves very high records.

—Ald. Gray, Chairman of the Board of Health, has sent in his resignation to the City Council. This step has been forced upon him by the obstruction offered by the Committee to his re-

commendations for the good management of that department. We sincerely hope that the worthy alderman may yet be induced to reconsider his present determination on receiving the unmistakeable support of the City Council itself; that of the public and the medical profession he already enjoys to a remarkable degree. His energetic action in the recent outbreak of smallpox is just what we might have expected of him. It will disgrace the Council if they thus lose the most efficient head of this important civic department they have ever had.

The Canadian Militia Gazette.—The military activity at present prevailing in Canada has resulted in the production of the first number of the *Canadian Militia Gazette*. We are glad to see that the medical department receives due attention, and that we are promised a careful watchfulness over the interests of this important branch of the service. Every one knows that the medical staff of our militia has been sadly neglected, and the present crisis has served to bring out its defects more clearly. There is ample scope for the *Gazette* to do a good work in exposing these and seeking to have them remedied. We advise all to send their names as subscribers. It is published at Ottawa.

—The American Medical Association held its 36th annual meeting at New Orleans on April 28th and following days. Amongst the business transacted was an important change in the arrangements for the forthcoming International Medical Congress to be held in 1887. The committee originally named, and who presented the invitation to the Copenhagen meeting, have been acting as an Executive Committee, and have already published a list of officers of the congress and its sections. It has now been decided that they are to add to their number thirty-eight members, one from each State and Territory, the District of Columbia, and the army and navy. This enlarged committee are then to proceed to revise and correct the lists previously published in all the journals. It is to be hoped that this will not lead to confusion and delay.

Glycerole of Celery Compound.—This safe mixture (containing no opium) for the relief of infants teething and for adults suffering from nervousness, headache, etc., supplies a want long felt by the profession, and should meet with their hearty support, as its advantages over the strong narcotics will be at once apparent to every physician. *Celery Compound* has been thoroughly tested and approved by the head nurse at the Toronto Infants' Home and Infirmary, and strongly recommended by her.

CANADA

MEDICAL & SURGICAL JOURNAL

JUNE, 1885.

Original Communications.

A CASE OF TUBERCULAR PERITONITIS WITH ENCYSTED COLLECTION OF FLUID, SIMULATING OVARIAN CYST.

By WILLIAM GARDNER, M.D.,

Professor of Gynæcology, McGill University; Gynæcologist to the Montreal General Hospital.

S. B., æt. 23, unmarried, domestic servant, belonging to a remote country district north of the Ottawa River, who had lived in the city during the previous six months, was sent to me about last midwinter by my friend Dr. George Ross for examination, as the suspicion of pregnancy had arisen in consequence of extensive abdominal enlargement. She admitted a pregnancy terminating at six or seven months a year and a half previous. She could give no definite account of the date at or about which the present abdominal enlargement began, but her mistress noticed it three or four months previous. It had rapidly increased since then. The girl complained of abdominal pain; menses had been absent for three or four months; general strength, health and appetite had declined, and she had become emaciated. The tongue was red.

Examination.—The belly much enlarged; the skin below the navel presenting recent pinkish striæ, as well as old silvery streaks. Well-marked fluctuation over the whole of the anterior and antero-lateral aspects of the abdomen. Dullness on percussion over the same area. In the lumbar region (flanks) and epigastrium the bowel note present. No firm or solid part

to be felt anywhere. The anterior aspect of the abdomen quite uniform. The perineum slightly lacerated and the posterior vaginal wall partially prolapsed. The uterus, measuring two inches, pressed upwards and forwards, lay immediately behind the pubes. The patient was admitted to the Montreal General Hospital and kept under observation for a few days, when it was found that she had fever of septic type, the temperature at times running very high, with profuse sweating and occasional attacks of vomiting. During this interval she was seen by Drs. Fenwick, Ross, Roddick, Shepherd and J. C. Cameron, who concurred in my diagnosis of suppurating ovarian cyst. Another symptom, red blush and œdema of the central anterior part of the abdominal wall, seemed to support the view. Operation was resolved on, but delayed on account of the difficulty in communicating with the girl's relations, so far distant from the city.

Operation.—The ordinary incision for ovariotomy was made, but on reaching the peritoneum no separation of parietal from visceral layer could be made ; the knife entered the collection of fluid, passing through what seemed to be a thickened, closely adherent cyst wall. The fluid was amber-colored, contained flakes, and in the last portions an obvious admixture of pus. The cyst wall did not collapse as the fluid escaped, but appeared to be adherent everywhere, even to the bottom of the pelvis. Acting on this view and with the concurrence of my friend Prof. Roddick, who was assisting, I decided to make no attempt at separation of the supposed cyst, but to drain and irrigate, as affording the patient the best chance. A large glass tube was passed through the wound into the Douglas pouch, and irrigation practised every two hours, night and day. At first weak carbolized water, then corrosive sublimate solutions, and finally solutions of iodine, were used for this purpose. The general condition at once improved, and this was maintained for a period of ten days. Fever diminished and appetite improved. After a few days the reflux water during irrigation contained enormous quantities of fibrinous, flaky material. Soon, however, her condition again declined. Temperature ran high ; sweats were profuse. The discharge always somewhat fœtid, became

more so. Soon after the operation the patient suddenly developed a cough with expectoration, which soon became purulent, and was at times bloody. Three weeks after the operation a large rubber drainage-tube was passed through the Douglas pouch and out by the vagina, being carried a few inches beyond the vulva. This did no good. She gradually sank, and died exhausted six weeks after the operation. Two days before death she complained of sore throat, and on examination the fauces, tonsils and posterior wall of the pharynx were found to be covered with a diphtheritic membrane. Until the autopsy, I adhered to the original diagnosis of suppurating, universally adherent, ovarian cyst. Dr. R. J. B. Howard, acting pathologist to the Hospital, made the autopsy. I append his report: —"On opening abdomen a large globular mass presents, of the size of a man's head, occupying false pelvis; this and the parietes are everywhere covered by a grey, rough membrane about one-eighth of an inch thick. The transverse colon is firmly adherent to the upper surface, and is also bound tightly down to the liver. A collection of pus is found below and by the side of the spleen, and another, smaller, under left lobe of liver in middle line. The anterior peritoneal cavity is thus converted into a suppurating cyst, extending from liver down into true pelvis, nearly filled by the mass, which is found to consist of all the intestines, except the transverse colon, closely matted together by recent slight adhesions, which are studded with miliary tubercles. The cyst wall is apparently much older than the inter-intestinal adhesions, and looks like an unhealthy granulating membrane. The walls and viscera of true pelvis are covered by the same membrane. The great omentum has quite disappeared; but no doubt had been spread out over the intestines, and formed part of the membrane covering them. All the abdominal viscera adherent to one another and to parietes. Liver fatty; contains a few gray granulations. Kidneys contain a few gray granulations. Lungs universally adherent; abundantly studded with gray granulations. Tonsils and pharynx—surface gray and sloughy-looking. No loss of substance; same appearance involves œsophagus opposite cricoid cartilage, and about four inches lower down."

Remarks.—The principal interest of the case lies in the diagnosis. It well illustrates how difficult it may be to definitely fix the real nature of an abdominal fluctuating tumor. The fact that the abdominal enlargement was uniform, central, and occupying the anterior and antero-lateral parts of the abdomen, to the exclusion of the flanks, where the clear percussion note shewed the presence of bowel, added to the difficulties. A similar case occurred to my colleague, Dr. Fenwick, some years ago. The same error of diagnosis was made by all who saw the case. This patient died some months after operation, probably also of tuberculous disease, as she developed a pleuritic effusion before leaving the hospital. Other similar cases are reported by Spencer Wells, Erich, Ewing Mears and Atlee. The well-known dangers of tapping ovarian tumors, in my opinion, make that procedure for obtaining fluid for microscopical examination unjustifiable, especially as there is no concurrence of opinion of microscopists as to the certainty of that means of diagnosis. Happily, the treatment in my case leaves no room for regret, as under the circumstances it was the very best that could have been applied. It clearly prolonged life, and if the peritonitis had been simple it would almost to a certainty have saved the life of the patient.

QUARTERLY RETROSPECT OF SURGERY.

By FRANCIS J. SHEPHERD, M.D., C.M., M.R.C.S, Eng.,
Surgeon to the Montreal General Hospital ; Professor of Anatomy and Lecturer on Operative Surgery, McGill University.

Treatment of Acute Peritonitis by Abdominal Section.—At a meeting of the Royal Medical and Chirurgical Society of London, held March 10th, 1885 (*Lancet*, March 14th, '85), Mr. Fred. Treves read a paper on the above subject. He remarked that the extreme fatality of acute diffused peritonitis, especially that form due to perforation, and the acknowledged futility of the modes of treatment that are at present employed, give some support to the proposal that acute peritoneal inflammation should be treated by the same methods that are successfully applied to other acute inflammations—viz., by free incision and drainage.

He urged the adoption of this principle of treatment in acute peritonitis, and illustrated the success of this treatment by the report of a case in which the abdomen was opened and the cavity washed out with many quarts of carbolic solution and a drain introduced. The case was that of a woman aged 21, who was admitted into hospital suffering from chronic pelvic peritonitis following gonorrhœa. Three months after the commencement of the chronic peritonitis, an acute diffused peritoneal inflammation suddenly developed, due, as was afterwards discovered, to the bursting of an abscess and the extravasation of its contents into the general peritoneal cavity. After the operation, the patient made a good recovery, and was in the garden on the 40th day.

At the same meeting, Mr. Howard Marsh read a paper on a case of "Acute Circumscribed Suppuration of the Peritoneum treated by abdominal section, with recovery." The patient was a medical student, aged 19, suffering from symptoms of sudden and acute peritoneal inflammation. The inflammation was localized, a swelling about eight inches square existing to the left of the umbilical region. An incision was decided upon, and gave vent to about two pints of fœtid pus. The abdomen was washed out thoroughly with a 1 to 60 solution of carbolic acid, and a large drainage-tube, eight inches long, introduced. This was gradually shortened, and the patient slowly recovered, the wound healing completely at the end of three months.

In the discussion which followed the reading of the papers, Mr. Thos. Bryant said he had long felt that the practice advocated by Mr. Treves was one that had not been sufficiently followed. He had, however, for ten years past, performed surgical operations on cases of localized suppuration in the peritoneum about the cæcum and pelvis ; the cause of peritonitis, he thought, must determine whether the surgeons should operate or not.

Mr. Knowsley Thornton said there was a form of peritonitis which appeared to be due to the mere presence of the tumour and not to any perforation—an acute dry peritonitis. He had operated in two of these cases ; one died and the other recovered after a very severe illness. In cases of perforation, he con-

sidered the proper course was to operate at once. Drainage was most important. He thought that, unless the surgeon could be certain of obtaining absolute asepsis, antiseptic irrigation should not be used. When asepsis was impossible, he should use large quantities of boiled water, with free drainage.

Drs. Douglas Powell and Goodhurst, and Messrs. Barwell and Meredith, agreed in commending the practice advocated by Mr. Treves.

The practice of opening the abdomen in cases of peritonitis due to perforation or wound in stomach and intestines is now advocated by all antiseptic surgeons, and this method of treatment is one which has already saved many lives. The general feeling amongst surgeons is that, considering the great fatality of acute diffused peritonitis, abdominal section should be resorted to, and the effused fluid evacuated, as is done in pleurisy with effusion. No doubt cases of acute suppurative peritonitis, due to perforation or the bursting of abscesses into the peritoneal cavity, are more suited to this treatment, and the results are apt to be more favorable than in those cases of peritonitis called "idiopathic," or due to some unknown cause. Such a case I saw recently in the post-mortem room of the Montreal General Hospital, in a young girl aged 13. In this case no cause could be found for the peritonitis, and the pus was of such a tenacious character that had the abdomen been opened it would not have drained away, and many parts, as, for instance, the lesser sac of the peritoneum, would have been uninfluenced by the most careful drainage.

Milkulicz of Cracow (*Central. für Chirurgie*, No. 45) says laparotomy is urgently indicated in any case of perforation of the stomach or intestine, due either to direct or indirect violence or some pathological process. The main contra-indication to operation is extreme exhaustion. He relates four cases of laparotomy. The first case was one of perityphlitis, when he evacuated two pints of fœtid fluid; this patient died five days after operation. Another of volvulus, where one pint of darkish fluid was found and the obstruction removed. Patient made a good recovery from the operation, but died from pneumonia some

weeks after. The third case is a very remarkable one. A young man was seized with intense pains in the umbilical region and presented symptoms of obstruction. Sixty hours after this he came under Prof. Milkulicz's care, and he diagnosed internal incarceration, and at once performed laparotomy. In the abdominal cavity he found a pint of thin fœtid pus and some undigested pieces of potato. He discovered also a perforation in the ileum on the left side, just above the brim of the pelvis. The mesenteric glands were enlarged, and Prof. Milkulicz came to the conclusion that it was a case of perforating ulcer from typhoid fever. He brought the edges of the perforated gut together, after being freshened, by a dozen silk sutures. The subsequent course of the case was satisfactory. The fourth case was one of ruptured stomach. Death followed the operation in three hours.

Krönlein has also resorted to the operation of laparotomy for peritonitis due to perforation of the appendix vermiformis.

Removal of Foreign Bodies from the Intestines.—At a meeting of the Clinical Society of London, held May 8th, 1885, Mr. Charles Symonds reported a case of removal of a calculus from the vermiform appendix for the relief of recurrent typhlitis. At first the attacks of typhlitis occurred almost once a month, but the last five weeks he had had six attacks. Three days before admission into hospital he had a severe attack. On examination, a small hard lump was felt in the left groin, a little above Poupart's ligament. This lump, which was painful on pressure, gradually increased in size. It was decided to make an exploratory incision under the spray. This was done two inches above and one inch internal to the anterior superior spine of the ilium. The swelling was incised, the appendix opened, and a calculus removed. There was no pus or fæcal odour. The opening in the appendix was then stitched up and the abdominal wound closed. Some time after pus escaped from the wound, and a sinus was left for several months, but when last seen the sinus had closed, and patient was able to do his work.

Dr. G. E. Fenwick of Montreal reported a case in a young girl to the Canada Medical Association in August 18th, '84, in

which he had successfully removed a large concretion from a Meckel's diverticulum. The presence of the concretion had given rise to an abscess, followed by a fæcal fistula. The abdomen was opened, the concretion removed, and the opening in the diverticulum stitched up. The girl made a slow but complete recovery.

Bullet Wound of the Abdomen ; Operation.—Mr. Annandale of Edinburgh (*Lancet*, April 25th, 1885) reports a case of a young lad aged 15 years, who was shot by the accidental discharge of a revolver through the abdomen, half an inch below, and to the left of, the umbilicus. The boy gave evidence of but little shock, and walked 100 yards after receiving the wound. He was admitted into the Infirmary and the bullet wound explored. It was found to penetrate the abdominal walls. The wound was enlarged and the intestines examined ; five wounds were found in the small intestine, two in the descending colon, and two in the pelvic portion of the rectum. There was also a wound of one of the large mesenteric veins, which gave rise to considerable hemorrhage. The bullet could not be found. There was no extravasation of fæcal matter. The wounds in the intestines were sutured with catgut, and the whole cavity of the abdomen sponged out with bichloride solution (1 to 2000). The patient rallied from the operation, but died within 24 hours of the accident from exhaustion. At the necropsy, the intestines were much distended with gas, and the abdominal cavity contained six ounces of brick-red serum. None of the sutures had given way ; in fact, they were all perfectly water-tight. The bullet was found on the right side of the pelvis, immediately in front of the ischial spine. Although this case proved fatal, why, it is not easy to say, Mr. Annandale feels encouraged to follow out the same practice should another case fall to his lot, as the condition of the wounded intestine after the sewing was in every way satisfactory.

Dr. M. E. Deschamps (*Revue de Chirurgie*, Nov. 1884) reports a case of *bullet wound of the stomach*, which did well for a week, when he left the hospital and went on a drinking bout, and died two days afterwards from peritonitis. The autopsy

showed the course of the bullet was through left sixth costal cartilage, then through the diaphragmatic portion of the pericardium, then stomach, diaphragm again, and lower border of lung was traversed. The bullet was found between the 9th and 10th ribs. The wound in the stomach was closed, and at the autopsy showed no perforation. Dr. Deschamps thinks that the patient would have recovered had he not left the hospital and taken to drinking. The treatment consisted of ice to the stomach, opiates and very light diet.

Surgery of the Stomach.—Operations on the stomach are now of so common occurrence as to give rise to but little comment when they occur. Still, the surgery of the stomach is only, as yet, in its infancy, and records of many cases will be required before exact rules can be formulated as to the proper procedure in the various diseases and accidents which call for surgical interference. In the *American Journal of the Medical Sciences* for April 1885, Dr. Winslow of Baltimore has collected nearly all the cases of pylorectomy and its substitutes—gastrectomy, gastrostomy, digital divulsion of pylorus, &c. He tabulates 61 excisions of pylorus, 13 gastro-enterostomies, 1 gastrectomy, 1 gastrostomy, 3 duodenostomies, and 6 cases of digital divulsion. The following is the summary given by Dr. Winslow :—

1. In cancer of the stomach not producing stenosis, give anodynes in quantities sufficient to relieve distress ; do not operate.

2. Pylorectomy for carcinoma is followed by 76 per cent. of mortality, hence it should only be exceptionally performed in those cases where, with marked stenosis, the pylorus is not adherent to the neighboring organs, and the patient is young and fairly strong.

3. In other cases of carcinomatous stenosis, as only very temporary benefit can be obtained, perform gastro-enterostomy.

4. In cicatricial stenosis, peform digital divulsion ; but if this is impossible, owing to great thickening of the walls, resection in those who are well-nourished and gastro-enterostomy in the debilitated will both be followed by good results.

5. In the opinion of the writer, hemorrhage or perforation

from ulcer or other causes than stenosis does not present indications for pylorectomy.

6. Duodenostomy, gastrostomy for the passage of a tube, and complete gastrectomy should be replaced by gastro-enterostomy.

According to an editorial in the *Medical News* of April 11th, 1885, of the 56 operations performed on the pylorus up to the present time for carcinomatous stenosis, 75 per cent. were immediately fatal—that is, perished as the result of the operation; in 72.72 per cent of the survivors, there was a return of the disease; and in 27.27 per cent., there was freedom of recurrence for less than one year. Not a single patient was permanently cured. In consequence of these results, the feeling that the operation is not justifiable is rapidly gaining ground.

Gastro-enterostomy has been performed 11 times, with three recoveries. One of the survivors died four weeks after, and the other two were alive after two and four months respectively. Gastrostomy and duodenostomy are not likely to be more successful. Hahn kept his patient alive two weeks by feeding through a tube passed into the duodenum. But the great mortality in all the above operations inclines the author of the editorial above quoted to believe that "such cases should be left to their fate, suffering being palliated by anodynes, and nourishment being afforded per rectum."

In Fibrous Obstruction of the Pylorus, several operations have been performed. Excision of the pylorus has been practiced in nine cases, of which five have recovered. Gastro-enterostomy has been done three times, with one death. (This operation consists in opening the stomach and also the upper part of the small intestine, and uniting these two artificial openings by sutures. It is performed when the pyloric tumor could not be removed.)

Duodenostomy and jejunostomy have also been performed. The first once and the second twice, but with a fatal issue in each case.

Loreta's Operation, or Digital Divulsion of the Stomach.—In the *Brit. Med. Journal* for Feb. 21st, 1885, Mr. T. Holmes gives an interesting summary of two papers by Prof. Loreta of

Bologna on the operative dilatation of the orifices of the stomach. This operation, which is performed for simple and fibrous stricture of the pylorus and cardia, and for cicatricial contraction of the cardiac end of the œsophagus, is a substitute for pylorectomy or gastrostomy. The operation is performed by making an incision two inches long on the anterior surface of the stomach near its pyloric end; the two index fingers are then introduced into the pylorus, which is then forcibly dilated. The chief difficulty of the operation is the great resistance offered by the pyloric sphincter. The first patient operated on in September, 1882, had suffered from dyspeptic symptoms for twenty years, and had been treated for ulcer of the stomach for three or four years. When the operation was undertaken he was in the last stage of emaciation and exhaustion. Digital divulsion of the pylorus was entirely successful, and "five months after the operation the man was in perfect health and doing his ordinary work." The operation has now been performed eight times, with two deaths.

Dr. Russell (*Brit. Med. Jour.*, Feb. 21st, '82) reports a case of non-malignant constriction of the pylorus, with great dilatation of the stomach, where the use of a syphon-tube for washing out the stomach had succeeded in restoring his digestive powers, and for five years he had lived in comparative comfort, and was well when last seen. Before employing Loreta's operation, it would perhaps be as well to put in practice this treatment of washing out the stomach, as no danger is incurred, and the operation of divulsion could be performed later if needed. This treatment by irrigation is not a new one, but the patient's life in this case has been remarkably prolonged.

Dr. D. G. Zesas, in the last number of *Langenbeck's Archiv für Klinisch Chirurgie*, gives an exhaustive article on "*Gastrostomy and its Results*," in which he analyzes 162 recorded cases, and also gives an extended history of the operation. Of these 162 cases, 107 were in men and 33 women, the sex of the remaining 22 cases is not recorded. It was performed 129 times for carcinoma, 31 times for cicatricial contraction, and in 2 cases for syphilitic disease of the œsophagus. The results of the opera-

tions were as follows :—Of the 129 cases with carcinoma, 111 died and 18 recovered ; of the 31 cases of cicatricial contraction, 20 died and 11 recovered ; both the syphilitic cases died. The causes of death in order were : Exhaustion, pneumonia, peritonitis, and collapse. The great majority of fatal cases died within thirty hours of the operation. After discussing the line of incision, and speaking favorably of Fenger's incision (a finger's-breadth below and parallel to the edge of ribs on left side, crossing the rectus muscle), and the question of immediate or delayed opening of the stomach, he goes on to describe the various methods of suture used, and discusses the propriety of feeding as soon as the stomach is opened or waiting for several days, and feeding per rectum. He advocates a small incision into the stomach sufficient to allow a soft catheter to pass, as then the part can be kept closed and remain clean, and there is little danger of infection. When a large incision is made, it is difficult to retain the contents of the stomach, the wound becomes unhealthy, and there is continual irritation in the neighborhood of the stricture.

The vomiting which follows the anæsthetic often gives a great deal of trouble after this operation, and continues sometimes for a couple of days, tearing through stitches and allowing contents of the stomach to escape. Dr. Zesas advocates the performance of gastrostomy by means of a local anæsthetic, as the pain of the operation is by no means great.

Since the introduction of antiseptic surgery the operation is much less fatal. Of 31 operations performed in the pre-antiseptic days, only one recovered ; of 131 operations performed since the introduction of antiseptics, 38 recovered ; and in time it is hoped the percentage of recoveries will be much increased.

The operation is indicated in all cases where there is great difficulty in swallowing, and where the œsophagus is becoming closed. This may occur (1) from congenital defect, (2) from cicatrices following wounds, the swallowing of caustic materials, and constitutional disease, (3) from new growth in the œsophagus itself or its neighborhood, and (4) from a firmly lodged foreign body. With regard to the advisability of performing

the operation in cancerous disease, the author says: Gastrostomy is indicated in cancerous stricture of the œsophagus, and should be performed early, and when the patient has still sufficient strength to bear the operation. The establishment of a fistulous opening into the stomach is preferable to death by hunger, and certainly prolongs life. In cases of cicatricial contraction of the œsophagus, the operation is a most suitable one, and is much more successful than when performed for cancerous disease.

Prof. Billroth (*Allgemeine Wiener Med. Zeitung*, Feb. 24th, 1885) reports two cases in which œsophagostomy and gastrostomy were severally performed for the removal of a foreign body. In each case a set of artificial teeth were swallowed, and necessitated operation. Both cases recovered without a bad symptom.

Toxic Enteritis caused by Corrosive Sublimate as a Surgical Dressing.—Dr. G. L. Peabody (*New York Med. Jour.*, March 14th, 1885) gives an account of eleven cases taken from the records of the New York Hospital, in which the use of perchloride as an antiseptic dressing or application was followed by obstinate diarrhœa, which did not yield to the usual remedies, and which sometimes ceased on the use of the drug being discontinued. In seven of the cases, the application was followed by frequent bloody discharges, griping, tenesmus, prostration, and death. His attention was drawn to the subject by an article by Dr. Fraenkel in the February number of *Virchow's Archiv*. Dr. Fraenkel had been directed to the subject by a short article in the *Centralblatt f. Gynäkologie*, by Stadfelt of Copenhagen, in which a fatal case of poisoning was reported from washing out the uterus with a solution of 1 to 1500 of corrosive sublimate after retained placenta. In this case the autopsy showed numerous ulcers of an irregular or circular shape in the large intestine. The mucous membrane generally was much congested. Several of the autopsies made by Dr. Peabody occurred in surgical cases where the bichloride had been used for irrigating abscess cavities, irrigating wounds after amputation of the breast, &c., wiping the peritoneum after laparotomy with sponges wet in bichloride solution 1–2000. Fraenkel (quoted in *Lancet*,

April 4th, 1885) says he has made autopsies of 14 cases treated by Schede with bichloride during the last two year and a half, in which toxic enteritis was produced by it. Of these 14 cases, two, he thinks, were killed by the poison directly. In the others, the drug did not seem wholly responsible for the fatal result. Salivation is exceptional in these cases. Inflammation is always present in the large intestine, but only exceptionally in the small. Schede (*Volkmann's Sammlung Klin. Vortrage*, No. 251) admits the dangers of bichloride in certain conditions, but thinks it doubtful whether the intestinal lesions may not be due to pyæmia; but both Fraenkel and Peabody say, in these cases of supposed poisoning, the usual lesions of pyæmia were absent. W. Thorn, assistant to the Female Clinic at Halle, in the same number of *Volkmann's Sammlung*, makes an urgent plea for its total abolition from midwifery and gynæcology, alleging its inferiority to carbolic acid, and the dangers attending its use. From these papers it would seem that the immediate use of intra-uterine injections of bichloride is dangerous and perhaps unwarranted. Dr. Peabody says that as far as he can learn death has not resulted from its use in surgical dressings, but has occurred only after irrigation of abscess cavities, uteri, vaginæ, large wounded surfaces, and peritoneum. He thinks it not unlikely that many deaths have resulted from its use that have been ascribed to other causes.

I have, for the last eighteen months, used bichloride dressings and douches in my surgical practice in the Montreal General Hospital, and have never yet met with any untoward results from its employment. I very rarely wash out abscesses with any antiseptic unless they are fœtid, and do not make use of the continued douche in operations, but during the operations, only occasionally irrigate the wound and again at the termination of the operation. The evil consequences in general surgery, I fancy, are due to an excessive and unnecessary use of the bichloride. Still, it is well to be on one's guard, and the notes of warning sounded in the papers quoted above will prove of the utmost value in rendering surgeons more cautious and gynæcologists less prodigal in the use of corrosive sublimate as an antiseptic.

Excision of Cerebral Tumors.—At a meeting of the Royal Medical and Chirurgical Society of London, held on 12th May last, Dr. Hughes-Bennett read a paper on a case of cerebral tumor, the surgical treatment of which was managed by Mr. Rickman Godlee (*Lancet*, May 16th, 1885). The chief features of interest in the case were that during life the existence of a tumor in the brain was diagnosed, its situation localized, and its size and shape approximated entirely by signs and symptoms exhibited, without any manifestations of the growth on the external surface. This growth was removed by a surgical operation, without any immediate injurious results on the intelligence or general condition of the patient, who lived, relieved of his former symptoms, for four weeks, and who, at the expiration of that time, died, not from any special failure of the nerve-centres, but from the effects of a secondary surgical complication. Dr. Bennett said the case, however, taught important physiological lessons, and suggested practical reflections which might prove useful to future medicine and surgery. The history and condition of the patient on examination were detailed, and the reasons given for the diagnosis. The subsequent surgical operation, the progress of the case, and the post-mortem examination were also described.

In the discussion which followed the reading of the paper, Dr. Hughlings-Jackson, after congratulating Dr. Bennett and Mr. Godlee, said there was a kind of monoplegia, often passing into hemiplegia, which was almost certain evidence of cerebral tumor. A paralysis beginning very locally, for instance, in the thumb and finger, and spreading slowly week by week. In such a case he should not advise trephining, since there would be a great probability of a large tumor of the centrum ovale. The convulsive seizures of localizing value were not cases of epilepsy proper, but epileptiform seizures, convulsions beginning one-sidedly, and only locally in hand, cheek or foot. These seizures did not always to a certainty point to tumor, for in some cases there was local softening. When, however, there was also double optic neuritis, such gross disease as a tumor might be confidently predicted. We also require some local persisting paralysis of

the part convulsed. So far then, Dr. Jackson remarked, three things were required for the diagnosis of cerebral tumor—local persisting paralysis, epileptiform convulsion, and double optic neuritis. He strongly advocated operation where the tumor could be localized, but said that we should not overlook three difficulties connected with operative interference—that the tumor might be very large, that there might be softening about it, and that, besides the tumor localized, there might be others. Cases were narrated illustrating these difficulties.

Dr. Ferrier had watched the case with the greatest interest, and was present at the operation. The patient bore the operation without any great shock to the nervous system, and, he might say, without danger to life, for there could be no doubt that death was due to an inflammatory complication. The operation, if performed strictly antiseptically, need not be attended with any risk of encephalitis.

Dr. Macewen, of Glasgow, then enumerated some cases, of which I give an abstract below.

After Dr. Bennett's reply, and some remarks by Mr. Horsley, in which he said from his experience of experiments on animals he believed that a permanent closing of the wound at the end of the operation was the proper course, Mr. Godlee said, in regard to the operation, that he had employed the actual cautery partly to arrest hæmorrhage and also to destroy the tumor, the deeper parts of which were indefinite. In his opinion, the inflammatory action was the cause of the hernia cerebri ; inflammation would probably not occur without some putrefaction having been set up. In removing the deep part of the tumour he had used a Volkmann's spoon, but some instrument larger and blunter would probably have answered better. Large wounds in man had not, in his experience, been well treated when the wound was completely closed, and he considered wounds in lower animals were not completely analagous to wounds in man, so that he agreed with Dr. Macewen that a drainage-tube should be used ; otherwise there would be no opportunity for an extensive effusion of serum and blood to make its way out. As to the cause of the disaster in his case, he had no doubt that it was due to putrefaction,

which was probably the result of imperfect purification of the scalp. At another time he should have the head shaved all over, and thoroughly washed first with soap and then with corrosive sublimate, and finally soaked in a strong solution of carbolic acid.

The interest in this case is rather medical than surgical. It was a triumph of medical diagnosis. Still there are many points in the case which are instructive surgically, and on which more light is needed. First, as to whether the wound should be closed permanently, as has been so successful in monkeys, or treated by drainage; and secondly, as to the mode of dealing with the hæmorrhage from the parenchyma. Gummata are frequently very vascular, and their removal would necessarily cause hæmorrhage. In Mr. Godlee's operation the hæmorrhage was great, and was controlled by the actual cautery. In monkeys Mr. Horsley has successfully employed morphia, injected hypodermically, to lessen the hæmorrhage, and it is worth trying in man.

In the *Lancet* for May 16th and 23rd, Dr. Macewen, of Glasgow, has a paper on *Cases Illustrative of Cerebral Surgery*. The first case, that of a man aged 36, was admitted with impairment of power of the left arm, accompanied by muscular twitchings of right side of face and pricking sensations from the shoulder down to the fingers of left arm. He, some months before, had fallen down stairs and was unconscious for twelve hours. When he recovered consciousness, the only thing he complained of was giddiness. Gradually the symptoms for which he was admitted came on. There was no external mark of injury on his head. From the history, as well as from his condition at time of examination, a lesion of the motor cortex in upper half of right ascending frontal convolution was diagnosed, and, as the patient was very desirous that something might be done to alleviate his condition, operation was determined on. Under chloroform a portion of the right parietal bone was removed one inch behind the auriculo-bregmatic line, and one inch above a line drawn from the external angular process of the frontal to the upper angle of

the lambdoidal suture, thus exposing the middle of the ascending frontal and parietal convolutions. A crucial incision was made into the dura mater, and a considerable quantity of clear fluid along with clots of blood about the size of a bean escaped; other clots adhering to the under-surface of the membrane were removed. No brain pulsation was seen, but a membrane-like patch involving the arachmoid and pia mater along with the external surface of grey matter was exposed. This was removed, and now the pulsations of the brain became distinct. The dura mater was replaced, and the disc of bone which had been removed, and which had its periosteum entirely stripped off, was divided into several portions and reimplanted into the aperture in the skull, a small opening being left at the side for drainage. The scalp was brought together with chromic gut, and a decalcified chicken bone tube placed between the scalp and the skull for drainage. The operation was done under the spray and eucalyptus dressings applied. The first dressing was done after 48 hours, and the second three weeks later, when the wound was found healed. The man never had a bad symptom. At the end of six weeks he had improved greatly, there were no twitchings, and he felt his left arm as strong as ever; eight months after he reported himself as regularly at work, and with the power in his left arm perfectly restored.

The second case was a woman aged 26, who was admitted into hospital suffering from left-sided hemiplegia. She had a clear history of syphilis of four years' standing. Among the manifestations of the tertiary period was an ulcer over the occipital line, principally of the left side. There was a history of injury over the same part, to which patient attributed the ulcer. Eight months after the ulcer healed, she began to experience a tingling sensation in the muscles of the left arm, and subsequently in those of the left leg, accompanied by muscular twitchings. Soon she lost power in left arm, and later in left leg. On admission three months later, patient was found to have absolute motor paralysis of left arm and leg, accompanied by slight rigidity. The sensation in the affected limbs was unimpaired. Her intelligence was dull and her memory

affected. Tapping the head gave rise to disagreeable feelings. The absence of anæsthesia from the beginning pointed to the lesion being cortical rather than central; and cortical lesion in right motor area, superior half of ascending frontal and parietal convolutions with probable involvement of paracentral lobule, was diagnosed. As treatment by counter-irritation and prolonged administration of anti-syphilitic remedies had failed to effect the slightest improvement, operative measures were advised. The operation was performed June, 1883. The hair having been partly shaven and the scalp thoroughly cleansed, first with soap and water, then with turpentine, and finally with antiseptic solution, a disc of bone over an inch in diameter was elevated from the right side of the skull, its anterior border touching a point half an inch between the auriculo-bregmatic line, whilst its upper margin reached a point about an inch from the centre of the longitudinal sinus. The internal table of the osseous disc removed showed osteophytic deposits (some projecting 1-16th of an inch), the dura mater was thickened, and a plastic, membrane-like effusion was found over the anterior and posterior ascending convolution and bridging fissure of Rolando. The brain towards the paracentral lobe was resisting, and so was incised, which caused the escape of a gummous fluid with pultaceous particles. Previous to the removal of this matter there were no brain pulsations, but when it was removed they were seen to a slight degree. The interior of the skull was now explored with a probe, and osteophytic projections discovered in the occipital bone, to remove which a second trepanning was performed. As in the previous case, the osseous fragments were reimplanted and the case dressed with gauze, and drainage used. The patient did well, and when last seen, a year and ten months after the operation, the power of the left leg and arm was restored and she was able to walk about to perform household work.

Dr. Macewen has had seventeen cases under his care in which operations have been performed upon the skull and its contents for the relief of cerebral pressure or other brain lesion. In fourteen trephining was performed, and in three elevation of

the bones. There were three deaths, but it was believed that trephining in no way hastened it. In eleven the bones which had been elevated were divided and reimplanted. Hernia cerebri has not followed as the result of any of these operations.

Dr. Macewen remarks that if inflammation in the brain exists at the time of the operation, hernia cerebri may form, notwithstanding the use of antiseptics.

Cerebral surgery is still in its infancy, and the cases of Dr. Macewen will help to give confidence as to the result of operative interference in cases which were formerly considered hopeless.

Treatment of Cold Abscess.—Prof. Verneuil (*Rev. de Thérapeutique*, Aug. 1884) obtains a rapid cure in almost all his cases of cold abscess, abscess from diseased bone or from congestion, &c., by ethereal injections of iodoform of the strength of one in twenty. The abscess is first aspirated by means of Potain's aspirator, and then receives from 100 to 300 grammes (3 ozs. to 9 ozs.) of the iodoform solution. By not exceeding this quantity (℥i to ℥iii of iodoform), no fear of accidents need be felt. The liquid penetrates into all the anfractuosities and diverticulæ of the abscess, the ether becoming absorbed or evaporated, and the antiseptic agent being deposited uniformly on the pyogenic membrane, the action of which it modifies. This simple means, so exempt from danger, and so easy of application, has proved highly successful, very large abscesses having yielded to three or four injections.—(*Quoted in London Practitioner for March.*)

Management of Abscess in Hip Disease.—Dr. A. B. Judson (*New York Med. Jour.*, Jan. 1885) says a comparison of these cases of osteitis of the hip which are free from purulent discharges and those in which such discharges occur, brings to light several circumstances which take away the dread of abscesses. Their occurrence, according to Dr. Judson, shortens the duration of the disease. The degree of deformity depends in no way on the presence or absence of purulent discharges. There is no evidence that the discharges, as such, exhaust the strength of the patient. The precept that pus should be released by an early and free incision is a rule which is not always to be fol-

lowed in the management of hip disease. If the collection of pus were the starting point or the main feature of the disease, an early and free incision would be admissible ; but in hip disease, the trouble is primarily and chiefly a disease of the bony tissue composing a joint, which is generally best treated by the administration of tonics and the regulation of the hygiene, and, locally, by fixation and protection from violence. If abscesses occur, it is shown by experience that the retention of pus, even in large quantities, or the presence of a purulent discharge, does not prevent the process of repair. The author has seen no case in which an incision for the release of pus has had a controlling influence for good, generally or locally. Except when tension or pain form decided indications for relief by incision, an expectant treatment is preferable.—(*Quoted in Annals of Surgery*, May 1885.)

Exsection of Fascia in Dupuytren's Contraction.—Dr. R. Gersung (*Wiener Med. Woch.*, Aug. 1884) makes a longitudinal incision of the integument over the prominent aponeurotic bands, and then, through the opening caused by the retraction of the skin, excises this part of the palmar fascia. The wound is closed by sutures and dressed antiseptically. The advantages of this method, he claims, are that there are no thickened and knotty cords left in the aponeurosis, and, further, that owing to the direction of the line of incision in the skin there is but little retraction of the tissues, and the wound heals readily.—(*Quoted in Practitioner*, March, 1885.)

Mr. Reeves (*Brit. Med. Jour.*, March 7th, 1885) also advocates this method of treatment, and reports a successful case in a woman aged 45, with contraction of ring finger of right hand.

Treatment of Ringworm of the Scalp.—Dr. James Forbes of Edinburgh (*Brit. Med. Jour.*, March 14th, 1885) advises the following treatment for ringworm of the scalp :—After having cut the hair around the spots, spirits of turpentine is freely poured over one or more spots at a time, the fingers being used to rub in the turpentine ; this gets rid of the dirt and grease, and the short stubbly hairs appear. As soon as the child feels the turpentine " nipping," it is washed off with carbolic soap and

warm water to make a lather, then the lather is washed off, and the head, which is now beautifully clean, dried. Two or three coats of common tincture of iodine are now painted well over the affected parts and allowed to dry, and carbolic oil is rubbed through the hair. This treatment applied night and morning generally cures the worst cases in the course of a week.

Cocaine in Surgery.—Dr. Morse of San Francisco (*Pacific Med. & Surg. Jour.*, May, 1885) reports a case of ligature of the common carotid artery prior to removal of a growth from the pharynx. Fearing the use of anæsthetics, he injected over the site of ligature three-quarters of a grain of cocaine and a quarter grain of morphia. The artery was ligated, then, beneath the omohyoid, without the patient feeling any pain.

New Operation for Naso-Pharyngeal or Fibrous Polypus.—Mr. Furneaux Jordan (*Brit. Med. Jour.*, May 2nd, 1885) advises that a triangular flap should be taken out of the upper lip and side of the nose. A curved bistoury is carried under the lip into the affected nostril, and made to cut its way out. Then the soft part of the nose is divided on one side of the middle line, in a line with the cut in the lip. A few touches of the knife permit the flap to be turned well outwards. The nasal cavity is found, expanded, well defined, and open to any sort of manipulation. To-and-fro traction by one or two fingers in the pharynx and one or two at the front, aided by snips from the scissors or knife, readily detach the tumor, which falls into the hand in the mouth. Delicate adjustment and stitches leave scars so fine that only careful search can find them.

Correspondence.

BERLIN, May 1, 1885.

To the Editor of the CANADA MEDICAL & SURGICAL JOURNAL.

DEAR SIR,—In presuming to write you a letter from here, your correspondent is painfully conscious that the medical soil of Berlin has been so often tilled, and has yielded such bountiful harvests already to the JOURNAL, that there is nothing new under the sun to write about.

The summer semester is now in full swing. The number of students attending in the medical course amounts in round numbers to nearly 1,000, while of these a great number are taking Virchow's classes at the Pathological Institute, the consequence being that a glance into his lecture-room would give a stranger the impression that it was a dime museum, for long before the lecture begins every available seat is filled and there is "standing room only"; indeed, a late-comer is very lucky if he can get a chance to lean against the wall.

Besides the teaching done by his assistants, Professor Virchow lectures himself one hour daily, and holds three demonstrations on morbid anatomy weekly, each lasting from two to three hours. The news of a daily lecture at 7 a.m. is rather startling to a Canadian, but soon the comforting assurance that the professor is *immer spät* tends to console him a little, and when he finds out that a lecture seldom begins till at least 45 minutes after "schedule time," he even begins to feel comparatively cheerful.

A visit to one of the *vie-hofs*, as the abattoir is called, proved full of interest. At the principal establishment on a busy day they slaughter about 2,500 pigs and other animals in proportion. At this vie-hof a staff of 80 trained inspectors is employed to detect diseased meat, and there is a well-equipped microscopical laboratory in connection with it. After watching the systematic way in which the inspection is performed, one almost feels inclined, in spite of deeply-rooted prejudices, to screw up one's courage and venture on a small piece of ham or even a sausage.

The medical men upon the staff are most obliging to visitors, and, on learning that the writer was interested in pathological

[*Our correspondent appears to have made a good start, but the facetious element evidently got the better of him before concluding.—ED.]

specimens, offered to send a regular weekly supply to his boarding-house. Unfortunately, the prophetic vision of an irate landlady and two weeks' notice compelled him hastily to decline. The most common diseases are, of course, trichina, cysticercus, and tuberculosis. Actinomycosis is almost daily met with, and in Berlin it is found more frequently in swine than in cattle.

To return to medical news proper. Quite a number of cases of epidemic cerebro-spinal meningitis have occurred here recently. This disease has a peculiar interest just now, owing to the fact that it, together with fracture of the patella, being the only two remaining diseases in which some German pathologist has not, as yet, succeeded in isolating to his own entire satisfaction some distinctive micro-organism. The prevalent opinion that Koch has recently discovered the bacillus of fractured patellæ would therefore seem to be erroneous, for it appears that (1) the bacillus in question had no connection with the human patella, but merely with the tibiæ of sundry dogs and rabbits, (2) that as the bones were fractured first and inoculated afterwards the bacillus could scarcely be said, strictly speaking, to stand to the fracture in the relation of cause to effect, and, lastly, Koch has lately solemnly affirmed (and there is no valid reason why he should not be implicitly believed) that it was not he, but some other man, who discovered the organism in question.

In spite of this, bacteriology has made vast strides in other directions. Prof. Donner and Dr. H. F. von Blitzen report (see *Krankheit's Archiv*, Bd. II., 1885) their investigations in reference to the *bacillus mal-de-meris*. They find it can readily be isolated by a very simple process which usually procures a temporary relief to the patient. Its favorite habitat would appear to be the lee scuppers, though it has been found in the gangways and even, especially in the more severe cases, in the cabins, while the brilliant pathway noticed at night in the wake of the ship, hitherto thought to be caused by surface infusoria, is undoubtedly due to the spores of this bacillus. Its incubation period in the human subject varies from three or four hours to as many days. The earliest symptoms are, singularly enough, exactly the reverse of those in *agoraphobia*. It flourishes at all

temperatures and seasons, thrives remarkably on sterilized Bouillon (readily obtained on all transatlantic steamers), less vigorously on tea and toast, while its growth can be temporarily arrested by the use of alcohol in a more or less concentrated form.

In a later number of the *Archives*, Dr. Blitzen has communicated some further details respecting this most interesting parasite. He states that he and his colleague, Prof. Donner, carefully controlled, by means of low powers, the lee scuppers of all the large steamers arriving in England during the past winter. This organism, which is usually accompanied by filaments of *leptothrix buccalis* and occasionally by colonies of *sarcinæ ventriculi*, was found in every case, and on one occasion was associated with very large numbers of the micrococcus of malignant endocarditis. Dr. Blitzen states that at first he was somewhat puzzled to explain this occurrence.

A learned physician has been for some time anxious to perform the experiment upon some extensive cultivating establishments unpleasantly near to the Charité, but has so far been unable to secure the necessary favorable conditions owing to an acute eruption of policemen in the vicinity.

A larger organism which has lately been investigated is the *Macrococcus Bolognæ*. This is seen either in rods or clumps hanging on nails in most butchers' stalls. Its color is brown, and occasionally mottled. This is a larger organism than those previously described, as it measures from two to ten feet in length and weighs from three to five pounds. The best way to isolate it is to buy a few for three pfennigs apiece. If treated with a smaller sum, it invariably breaks up into smaller pieces called spores, and then proceeds to spread rapidly. It is good to eat.

The micrococcus Limbergeri has recently been the subject of numerous investigations. In fact every stranger, soon after his arrival in Germany, attempts to investigate it, and with very various results. Unlike those mentioned above, it is very difficult to isolate. One plan lately suggested by Prof. O'D. Rossa (*United Ireland*, 1885) seems to be feasible. It consists in isolating the micrococcus, together with its pabulum and a large

portion of the adjoining sidewalk, by the judicious application of a few pounds of dynamite. This species is *not* good to eat.

Your readers will now be relieved to learn that for the present they will be spared any further remarks upon bacteriology, as the *spiro-gyra barrel-organi* is breeding so freely upon some pieces of Lohengrin just outside the window, that all other matters must be suspended till the disease has been isolated with a bootjack and destroyed by a moist heat of 212°F.

I remain, yours antiseptically,

TERMO.

Hospital Reports

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL

CASES OF HYDRO- AND PYO-PNEUMOTHORAX RESULTING FROM TUBERCULAR DISEASE OF THE LUNG.

UNDER THE CARE OF DR. GEO. ROSS.

CASE NO. I.—*Early stage of Tubercular affection—Pneumothorax—Rapid accumulation of fluid—Great relief from aspiration—Long interval of fair health—Thoracentesis—Death from Hæmoptysis.*

J. K., aged 20, laborer, single, was admitted March 6th, 1884, with great shortness of breath, severe pain in left side, and a dry, irritating cough. Family history negative as regards tubercular diathesis. Has always enjoyed good health up to January 1884. Was then treated in this hospital, the diagnosis being tubercular affection of the lung in stage of deposition. Was discharged after a few weeks improved, and remained fairly well while at home. His present attack began March 5th, '84. Had a slight chill, soon felt feverish, and remained in bed ; no pain. About 2 a.m. March 6th, was suddenly seized with a sharp, lancinating pain in left mammary region, diffusing itself in all directions, and increased on inspiration, causing the breathing to be very short and shallow ; pain lessened in about 12 hours. Says when it first appeared he heard something snap in left side.

On admission.—Patient anæmic and emaciated ; tongue clean, bowels regular, and appetite good. Pulse 120 ; respiration 30 ;

temperature 103°F. Has a severe cough ; expectoration frothy and bronchial ; complains of some pain in left side, but it does not seem to interfere with respiration.

Examination.—Expansion deficient, particularly on left side. Left intercostal spaces effaced. Mensuration : left, 18½ inches ; right 17½. Vocal fremitus almost absent on left side. Percussion, on left side tympanitic ; right hyper-resonant, with exaggerated breathing. Well-marked amphoric respiration over whole of left lung, with moist crackling râles in scapular region. Bell-note and succussion sound very distinctly heard. Heart-apex not seen or felt in proper area, but occupies a position to right of sternum in 5th interspace, with a triangular area of cardiac dulness in this situation ; no murmur. Urine normal.

March 23rd.—Pain disappeared; dyspnœa much less ; cough not troublesome ; pulse ranges between 120 and 100 ; respirations 36 and 28 ; temperature 98° to 100°. This condition of affairs gradually developed, as did the change in physical signs. The same amphoric phenomena remain ; but fluid increasing. In sitting posture, dull flat note in front to 5th rib ; behind, to angle of scapula. This dulness changes on changing position of patient. Heart displaced more to right. Succussion sound very distinct ; patient can hear it himself when turning in bed, or otherwise suddenly moving.

April 8th.—Fluid increased to 3rd rib in front in sitting posture. Pulse 100. Respiration 30. Temperature 100° in the morning, 101° at night. Complains more of dyspnœa when sitting up. Otherwise general condition good. *17th.*—Dulness as high as 3rd rib in front, correspondingly as high behind, and in axillary region. Breathing over fluid is weak and distant, but of an amphoric quality. Pulse 110 ; respiration 24 ; temperature 97° to 101°. *22nd.*—Pulse 110 ; respiration 32. Dyspnœa at night. Decubitus always on left side. Dull note reaches as high as 1st rib. Heart on right side, midway between nipple and sternum, in 4th interspace. Aspirated chest, removing 73 ozs. slightly turbid fluid. During operation patient had a paroxysmal fit of coughing and severe pain over the heart. *23rd.*—Pulse 112 ; respiration 24 ; tem-

perature 100° to 101½°. No thoracic pain, but coughing considerably; expectoration muco-purulent and streaked with blood. Examination showed slight expansion of left side with tympanitic note. Above 4th rib in front and 8th behind, breathing remains amphoric, and we have the same bell-note and succussion sound. Heart-apex in 4th interspace on right side, close to sternum, having moved about three-quarters of an inch to the left. 30*th.*—No change in the physical signs. All the amphoric phenomena beautifully demonstrated, and the fluid not increasing. General condition good, and improving.

May 31*st.*—No marked change in patient since last note. Dulness to 7th rib behind; fluid gradually increasing.

June 15*th.*—Since last note, patient has remained about the same. Moist râles, with amphoric signs, remain. Pulse 100; respiration 24; temperature normal. Condition good. Discharged, with advice as regards habits, &c.

The patient returned on 30th June to be examined. Dulness at 4th rib in front, 6th behind, this being moveable according to patient's position; other regions of lung hyper-resonant, and breathing amphoric, weak and distant over dull areas; succussion and amphoric tinkling remain as before.

Aug. 25*th.*—Since last note patient remained fairly well; feels stronger, and gained flesh. Dyspnœa on exertion. Cough remains; expectoration of the same character. Pulse 100; respiration 32; temperature normal. Examination revealed dull flat note over whole of left lung, front and back, with the exception of a small area beneath clavicle and supra spinous region; amphoric respiration, with large mucous râles in infra clavicular region; elsewhere, breath sounds feeble and distant; succussion sound absent. Right lung, vesicular, harsh respiration, with small crepitant râles in mammary and upper axillary, not removed by coughing. Did not remain in hospital.

Sept. 26*th.*—Admitted on account of cough and dyspnœa; dulness up to 2nd rib. Breath sounds very feeble and distant. Apex 5th right space one inch to left of nipple.

Oct. 4*th.*—Aspirated in two different places; only about 4 ozs. of serum removed, but was apparently benefited. Dyspnœa

and cough less. 21*st.*—Condition of left lung remains unchanged. The crepitant râles remain as before in right lung, and appeared recently in infra-clavicular. Discharged.

Dec. 26*th.*—Readmitted. Since last examination, cough and dyspnœa severe. Expectoration moderate in amount, muco-purulent, and devoid of elastic tissue. Condition of lungs remain unchanged.

Jan. 7*th.*—Examination showed expansion of right 1 inch; left, ½ inch. Mensuration: right, 18½ inches; left, 18 inches. Fremitus absent over left, with exception of infra-clavicular; upper axillary and supra-scapular resonance modified accordingly. Dulness below 3rd rib in front, and below 6th behind; above, hyper-resonant. Amphoric respiration over resonant areas of the same character, but weak over dull areas. Succussion and tinkling distinctly heard. Pulse 100; respiration 30; temperature normal. 12*th.*—Complains of severe pain in left mammary region; had several attacks of hæmoptysis, checked by astringents. Fluid gives dull note up to 2nd rib; otherwise, same.

Feb. 9*th.*—Aspirated and removed 48 ozs. of a greenish-white opaque fluid, purulent in character. Under the microscope, abundant pus cells. Apex in normal situation. Condition of patient much improved by operation. Amphoric condition as before over all areas. Pulse 110; respiration 30; temperature 100°. 17*th.*—Pain left mammary region; fluid increasing. Physical signs remain as before. Temperature 101°; pulse 110; respiration 32. 20*th.*—Temperature 104°; pulse 120. Other conditions same as last note. 23*rd.*—Slight attack of hæmoptysis. Temperature 103°.

March 17*th.*—Patient's general condition one of septic absorption. Temperature 103° to 104°; pulse 120 to 130. Fluid reaches 2nd rib. 19*th.*—Thoracentesis was performed by Dr. Shepherd. A large quantity of pus was removed, somewhat fœtid. Dressed antiseptically. Temperature 105°; pulse 120. Sweats profusely. 25*th.*—Has been dressed every second day; discharge decreasing. Temperature 101° to 102½°; pulse 120; respiration 24. Sweats profusely; no dyspnœa.

April 1*st.*—Discharge moderate; no fœtor. Patient quite

anæmic, rapidly losing flesh, and sweating profusely. Pulse 110; respiration 24; temperature 102°. *10th.*—Patient has been gradually losing ground. On removing the dressings this morning some clotted blood on inner side. A few minutes after being dressed patient commenced spitting blood, blood also coming from opening in side and rapidly saturating dressings. The hemorrhage soon became profuse, and in a few minutes patient was dead.

Autopsy.—Heart normal, and in usual place. Pericardium a good deal thickened toward left side. Left pleural cavity lined by a buff colored, laminated, fibrinous membrane, partly obliterated toward apex by strong adhesions. It contains an enormous clot, weighing 503 grammes, and measuring 17 fluid ounces. Left lung collapsed against vertebræ, airless; upper lobe, the size of a woman's fist, occupied by a cavity whose walls are lined by greyish membrane at the extreme apex, but lower down present a gnawed and ragged appearance, and are crossed in places by strands of tissue consisting almost entirely of vessels and bronchioles. The cavity is full of blood. Toward the posterior and lower part of this cavity there is a free opening, the size of a pencil, into the pleural space. Lower lobe studded with small caseous nodules. Right pleura healthy. Right lung: extreme emphysema; many granulations in lower part of upper lobe. Liver and kidneys fatty.

CASE No. II.—*Latent Phthisis—Pneumothorax—Fluid rapidly become purulent—Thoracentesis—Surgical Scarlatina—Fatal, with nervous symptoms.*

C. S., aged 19, servant, admitted November 5, 1884. Complains of pain in left side, shortness of breath and general weakness. Always a strong, healthy girl up to 18 months ago. While crossing the Atlantic contracted a severe cold, leaving behind a cough that persisted all last summer and up to date. Had slight attacks of rheumatism in December last. Family history good. Present illness began about six weeks ago with a sudden, sharp pain in the left side, accompanied by cough without expectoration. Still continued to do her work for three

weeks; during the fourth week was compelled to lie down for a short time; felt weak and very thirsty, especially at night. These symptoms increased in severity, except the cough, until a week ago, when she was so weak she had to go to bed. During the last two weeks cough has been absent. Since admission it has returned.

On examination left side, expansion nil; fremitus absent; resonance very weak; tympanitic percussion-resonance (supine position) all over anterior regions to anterior fold of axilla; (sitting up) flat note from 3rd in front, 6th behind. Amphoric respiration over resonant areas; weak and distant in dull areas, with a faint amphoric quality; metallic tinkling and succussion beautifully heard. Right lung—Expansion good, hyper-resonant, and loud vesicular respiration. Heart-apex in 3rd interspace, 1¼ inches to right of sternum; no murmurs. Pulse, 120; respiration, 40; temperature, 100°-102°. General condition, one of extreme weakness.

Nov. 8th.—Temperature, 98°-101°; pulse, 120; respiration, 40. Patient very weak; passed a restless night; dulness reaches 3rd rib, and correspondingly high behind. Other physical signs remain unchanged. Decubitus, left side. *17th.*—Patient passed an uncomfortable night. 7 p.m —Vomited after taking oil; this exertion caused violent dyspnœa. An attack of orthopnœa during night and early morning. *22nd.*—Passed comfortable night. Examination shows dulness top of 2nd rib. Chest aspirated, and 70 ℥ of greenish-yellow pus removed. The heart returned to left side; felt first under right border of sternum. Pulse, 120; respiration, 38; temperature fluctuates between 101°, and normal. *24th.*—Pleural cavity opened (under chloroform); 60℥ of thick pus removed. With each inspiration air bubbled through the pus, showing that the opening in lung still remained. Dressed antiseptically, and rubber tube used on account of close apposition of ribs. *25th.*—Wound permitted much oozing during night; dressings saturated, removed, and fresh applied. Pulse, 104; respiration, 32; temperature, 101°. Cough, with muco-purulent expectoration. *29th.*—Vomited much during the night. Tem-

perature, a.m., 102½°. Scarlatinal rash present over the lower abdominal zone, bend of elbows and calves of legs. Patient very drowsy; can be roused, and quite rational. Dressed: discharge profuse, but septic. *30th.*—Patient very restless. Temperature, 104°-105°; respiration, 30; pulse, 130. Vomited all through the night, and was very delirious. Passed urine and fæces in bed.

Dec. 2nd.—Temperature, 102°; pulse, 144, and very weak; respiration, 40. All night wildly delirious. Passed urine and fæces in bed. Rash is bright, and more diffused over body. Dressed: discharge lessening; quite aseptic. *3rd.*—Temperature, 101°; pulse, 140; respiration, 40. Delirious; tongue red; enlarged papillæ. Rash almost disappeared. Face, semi-icteroid hue. Dressed: wound healthy; discharge profuse; urine, very dark. No reaction to bile pigment; no vomiting since yesterday. *4th-5th.*—Same condition; gradually getting weaker. *6th.*—Temperature, 103°; pulse, 141; respiration, 44. Very weak; semi-delirious, but takes nourishment. Died this morning.

Autopsy.—Some yellow serum in anterior mediastinum. Parietal pericardium much thickened. Both layers of left pleura very rough and thick; cavity obliterated in front, contains about ʒiss pus behind. Lung completely collapsed, lying against vertebral column. In some places, especially toward apex, strong fibrous bands, some three-fourths of an inch in diameter, pass between two layers of pleura. Lungs—Small caseous nodule, size of a bean, in left apex, with several still smaller near it. In right lung a small spot of softening posteriorly, containing a few drops of pus. Liver much enlarged; fatty. Catarrh of small bowel, especially near ileo-cœcal valve. Mesenteric glands much enlarged.

Case No. III.—*Advanced Phthisis—Hydro-pneumothorax—Rapidly fatal by apnœa and exhaustion.*

E C., aged 27, stonecutter, single, was admitted August 1st, 1884, suffering from pain in left side, cough, and shortness of breath. Has had cough and night sweats, and has lost flesh for

the past eight months ; symptoms having become aggravated of late. Also an indefinite history of syphilis three years ago. Family history : One sister died of phthisis ; other members of family healthy. Present attack came on quite suddenly. On Tuesday, July 29th, '84, while lying on the sofa after a heavy meal, without any apparent cause, he experienced severe stabbing pain in left mammary region, increased by inspiratory act. Great dyspnœa and cough rapidly set in, and have continued up to date.

On admission—Patient is anæmic and emaciated, the muscles soft and flabby ; finger-nails clubbed ; lips cyanotic ; conformation of chest scrofulous ; pulse 112 ; respiration 36 ; temperature 100°. Examination : Left side, expansion nil ; right good. Mensuration, right 18¼ ; left 18. Fremitus absent. On percussion, tympanitic over whole of left lung to angle of scapula ; below this, quite flat. Mediastinum and cardiac area tympanitic ; this note also extends beyond normal limit of lung. Breathing amphoric, with moist râles. Succussion and metallic tinkling distinctly heard. Right side, dull, high-pitched note in infraclavicular region, with harsh breathing and moist râles ; puerile breathing in other regions. Heart-apex, 4th right interspace, midway between nipple and sternum, no murmur. Urine normal.

Aug. 8th.—Fluid increasing ; otherwise the same. Pulse 100 ; respiration 30 ; temperature 101°. Great distress from the cough and dyspnœa. General condition not improved. *14th.*—Patient getting weaker ; decubitus left side ; complains very much of cough and dyspnœa. Pulse 110 ; respiration 36 ; temperature 101°. *30th.*—Remains about the same. Physical signs unchanged. Feeling of suffocation when lying down.

Sept. 17th.—Patient has been gradually getting weaker. Fluid increasing. Pulse 120 ; respiration 38 ; temperature 101°. Died of exhaustion at 9 p.m.

Autopsy.—Diaphragm bulged down on left side to lower end of costal margin; displacing the liver downwards, lower border at umbilicus. Spleen displaced downwards, being on a level with crest of ilium. On removing sternum, a quantity of compressed air escaped. Left pleura contains a quantity of sero-

purulent matter, 50 ℥ in all, in which a large flake of lymph was floating. Left lung greatly compressed and covered with a dense coat of lymph extending to the costal pleura, and most marked at the lower part of pleural cavity. A number of dense bands bound down the lung at apex and also pulmonary pleura to the pleura over the pericardium. Right pleura contained a little fluid. Apex of lung was firmly adherent to costal pleura. Heart's apex on a level with fourth interspace, under sternum. No excess of pericardial fluid. After removal of left lung, on further examination of apex, a small hole about one-eighth of an inch in diameter was seen to communicate with a small cavity. On section of right lung, a small cavity was found on the apex. Upper lobe of lung was well filled with tubercles, and lower lobe had a moderate amount. Liver was enlarged, and showed signs of fatty degeneration. Kidneys normal. Mesenteric glands were slightly enlarged.

CASE No. IV.—*Advanced Phthisis—Hydro-pneumothorax—Rapidly fatal.*

W. S., aged 22, clerk, single, was admitted Feb. 35th, '85, suffering from shortness of breath, cough, severe and very troublesome pain in left side, and general weakness. Has always been healthy until about a year ago; since then failing in health and strength, losing flesh. No cough until six months ago, and has continued up to date, expectoration all the time being muco-purulent. Has had night sweats; no hæmoptysis. Family history: one sister died of phthisis; other members healthy. Present attack: On the night of Feb. 21st, while in bed, was seized with severe cramp-like pains in left mammary region, rapidly developing, and diffusing itself to all the other areas of chest; no fit of coughing previous. Felt as if something had given way. Breath very short directly after pain, and remained so ever since.

On admission—Patient very anæmic, emaciated, and muscles soft and flabby. Pulse 120; respiration 36, short and shallow; temperature 102°; coated tongue. On examination, left side expansion nil, bulging; intercostal spaces obliterated; tympan-

itic note, with obliteration of cardiac dulness ; area of percussion extends beyond normal limits ; breathing feeble, with amphoric and metallic phenomena ; succussion sound marked. Right side, dull at apex, front and back ; harsh blowing breathing, with numerous moist râles over anterior region and to angle of scapula behind. Heart : apex at right nipple, no murmur.

March 4th.—Gradually getting weaker ; breathing very difficult ; respiration 48 ; pulse 130 ; temperature 100° to 104°. Unable to take nourishment. Died at 2 a.m. to-day. No autopsy.

Reviews and Notices of Books.

The Principles and Practice of Gynæcology.—By Dr. Thomas Addis Emmet, Surgeon to the New York Women's Hospital, &c. Third edition. Philadelphia : Henry C. Lea's Son & Co. 1884.

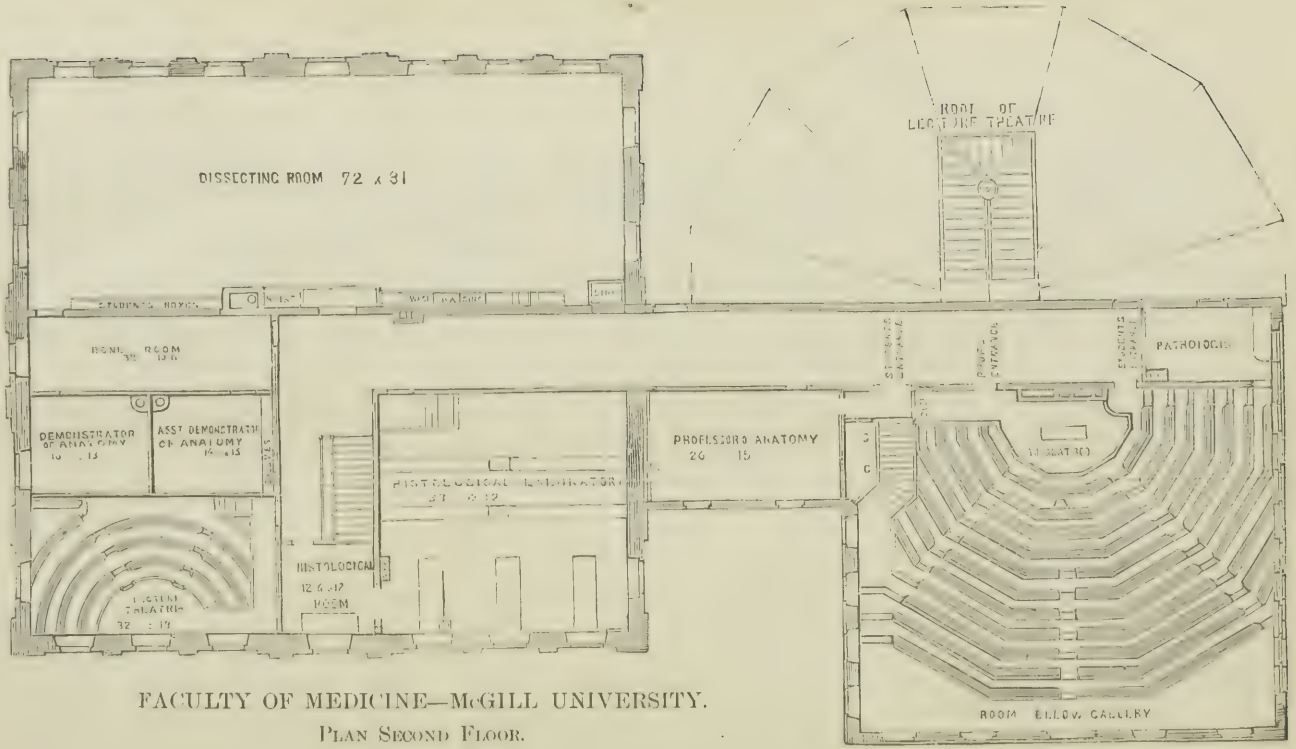
The first edition of this well-known work appeared in March 1879 ; the appearance of a third in six years indicates the great influence wielded by the distinguished author in his specialty. There can be no doubt that not a man living, or any dead these last ten years, has done so much for the advancement of gynæcology. The author claims in his preface to have added to, revised and rewritten a large part of his work, and an examination of the book fully justifies his claim. Like every good, honest progressive man, profiting by his vast experience, he has modified, and in some cases changed his views. He has advanced. These changes have been foreshadowed by papers contributed to the American Gynæcological and other societies, and published in the current periodical literature of the last three years. The most important new things in the book are the description of a new operation for narrowing the posterior vaginal wall and perineum, and the operations on the bladder and urethra for the diagnosis and treatment of disease of these organs. We naturally turn with, perhaps, most curiosity to the chapters on laceration of the cervix uteri and its treatment. Certain recent utterances of the distinguished author had led us to expect some modification of doctrines promulgated in previous

editions. Dr. Emmet does not operate as often as formerly. He finds that the preparatory treatment sometimes removes the symptoms, which are therefore often due to the cellulitis and endometritis which complicate the laceration. With reference to the proper cases to select for operation, the following sentence will convey the author's opinion: "I should state in a general way that when reflex symptoms exist, with enlargement of the uterus, after the cellulitis has been fairly removed, and when the woman suffers from neuralgia and persistent anæmia, an operation is necessary, notwithstanding the parts may have healed completely, and the thorough removal of the cicatricial tissue from the angles is absolutely necessary for success."

Dr. Emmet is sometimes startling in the opinions he sets forth, but this is probably true of most new opinions. Adverse criticism seems scarcely less than presumptuous on the part of men of less experience. Who, then, may presume to criticise this author? Very few, certainly. Dr. Emmet's attention to details indicates an important source of his success. It is evidenced in every page of his book. We have not space to say anything more than that every practitioner who practices gynæcology should carefully study its every page.

Elements of Surgical Diagnosis.—By A. Pearce Gould, M.S., M.B., Lond., F.R.C.S., Eng., &c. Philadelphia: Henry C. Lea's Son & Co.

This is one of those manuals for medical students which are now being published simultaneously in London and Philadelphia. It fully sustains the reputation acquired by its predecessors in the series, and will be much sought after by senior medical students engaged in hospital work. The diagnosis of injuries is separated from that of diseases for the sake of simplicity. The book opens with a valuable introductory chapter on the art of diagnosis, which it would repay many practitioners, as well as students, to "read, mark, learn and inwardly digest." After describing the diagnosis of the injuries of the various parts of the body, there are several chapters on the diagnosis of tumors and swellings, ulcers, sinus and fistula, and gangrene; then come the



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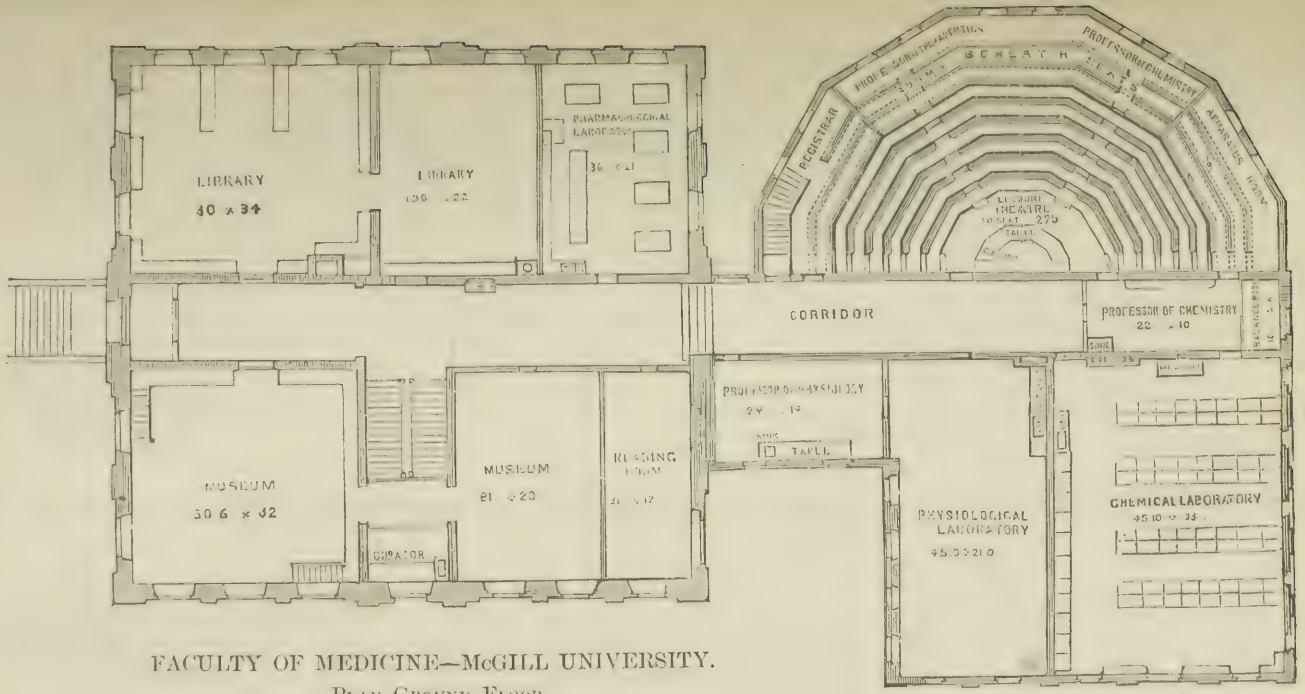

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chapters on diseases to which different parts of the body are liable. The work is remarkably concise, and for its size contains an immense amount of information which is admirably and systematically arranged. We can unhesitating recommend this work not only to students, but also to practitioners, old and young.

A Manual for the Practice of Surgery.—By THOMAS BRYANT, F.R.C.S., Eng. Fourth edition; with 747 illustrations. Philadelphia: Henry C. Lea's Son & Co.

The fourth edition of a manual of surgery needs but little praise. Like the good knight of old, it has won its spurs, and cares little for what men may say of it. We need only mention that every chapter has been carefully revised, and, where necessary, new material added. Many sections have been entirely rewritten, those especially, where, owing to the ever onward march of knowledge, matter, even only a couple of years old, seems out of date and ancient. Under such a category come operations on the kidney, removal of tumors from the bladder, hysterectomy, osteotomy, Charcot's disease, &c. Embodied in the chapter on colotomy is a synopsis of the paper read by the author at the Copenhagen Medical Congress in 1884, which contains the analysis of 82 cases performed by himself. This is a most valuable addition to the literature of the operation. The author's operation of colectomy is also described. Some chromo-lithographs of diseases of the tongue, breast, &c., are included in this addition, but, in our opinion, in no way enhance its value. Mr. Bryant is to be congratulated on the popularity of his book, which is well deserved, and shows that the reading medical public is appreciative of honest work.

A Manual of the Medical Botany of North America. By LAURENCE JOHNSON, A.M., M.D., Lecturer on Medical Botany, Medical Department of the University of the City of New York, &c. New York: Wm. Wood & Co.

There is ample room for a book of this nature to do good service. Knowledge of the numerous plants indigenous to this country which possess more or less active medicinal properties

is not sufficiently general. A good deal of scepticism about them comes thus to be expressed, much of which may possibly be traceable to ignorance of the actual facts. A great many of our common Canadian and American plants furnish useful additions to the physician's armamentarium, and, though, perhaps, not calculated to displace more potent remedies, may yet usefully serve him to meet special indications and special circumstances. We find here a pretty complete exposition of all the North American plants known to be medicinal, and which are either recognized officinally or have been proved by long household usage to have some beneficent properties. It surprises one to see what a long list they make. An examination of the pages makes us think that the views here expressed are generally very moderate—no exaggerated claims being made for the potency of the various drugs, but their merits fairly presented in accordance with such reasonable evidence as is afforded by the writings of observant men, and by the author's own experience. It has been so prepared as to act as a short manual for those not familiar with botanical studies, a long chapter serving as an introduction upon "the general principles of vegetable growth and reproduction," with a glossary of botanical terms. It is embellished with several very handsome colored plates of important plants, and numerous woodcuts.

A Practical Treatise on the Diseases of the Ear, including a sketch of Aural Anatomy and Physiology.—By D. B. St. John Roosa, M.D., LL.D., Professor of Diseases of the Eye and Ear in the New York Post-Graduate Medical School and President of the Faculty, &c. Sixth edition; revised and enlarged. New York: Wm. Wood & Co.

When the first edition of this work was published, eleven years ago, otology was enriched by a fund of knowledge partly in the form of a clear and concise exposition of a subject which at that period seemed to require a good deal of boiling down of crude materials, and partly by the results of Dr. Roosa's own observations and experience in this progressive branch of science; and

although the first edition may still be looked upon as a standard work, the great advances since made in aural surgery have necessitated some alterations and many additions in all its divisions, but more especially in regard to the pathology and treatment of ear diseases. The work is, therefore, in its sixth edition, considerably larger than formerly, and now appears as a handsome volume of 700 pages, every one of which is worthy of careful perusal. The illustrations are numerous and remarkably well executed. If anyone imagines a treatise on aural surgery must necessarily contain a great deal of dry and difficult reading, he has only to study this work and be thoroughly convinced to the contrary. The first chapter deals with the progress of otology, and is replete with interesting and instructive historical facts. To this is appended an alphabetical list of authorities consulted by the author. Throughout the work, the author's arrangement of facts is such as will commend itself to the reader as being easy and natural. Before dealing with the morbid conditions of the different natural divisions of the organ of hearing, a lucid and sufficiently exhaustive description of the anatomy and physiology pertaining to each is given, a circumstance that cannot fail to meet the approval of intelligent readers. When such works as this are considered an indispensable part of every educated physician's library—and the day has now come when they should be so—the conscientious practitioner will learn that diseases of the ear are just as amenable to treatment as those of any other organ, and by taking the proper measures in time to prevent the ravages of disease which stupid negligence has almost habitually allowed to do its worst amid the most delicate of all structures, one more fruitful source of human misery will be reduced to a minimum. We most cordially commend the work to every student and every practitioner of medicine and surgery.

Aneurisms of the Aorta, with especial reference to their position, direction and effects.—By Oswald Browne, M.A., M.B., Trin. Coll., lately House Physician at St. Bartholomew's Hospital. London: H. K. Lewis.

This pamphlet, which is a reproduction of an exercise for

the degree of M.B. in the University of Cambridge, consists of an elaborate analysis of 88 unpublished cases of aneurism of the aorta, together with an examination of, and remarks upon, all the cases of aneurism of the aorta dying in St. Bartholomew's Hospital during the last 17 years. To all who are interested in the subject, this collection will form a valuable reference for points connected with the portion of the vessel affected, the direction the growth is likely to take, and the effects which are to be expected from it. The tables are very complete, and have been compiled with great care.

Books and Pamphlets Received.

What to do in Cases of Poisoning. By William Murrell, M.D., F.R.C.P. Fourth edition. London: H. K. Lewis.

A Practical Treatise on Urinary and Renal Diseases, including Primary Deposits. Illustrated by numerous cases and engravings. By William Roberts, M.D., F.R.S., assisted by Robert Maguire, M.D., Lond. Fourth edition. Philadelphia: Lea Brothers & Co.

A Treatise on the Science and Practice of Midwifery. By W. S. Playfair, M.D., F.R.C.P. Fourth American from the fifth English edition; with notes and additions by Robert P. Harris, M.D. Philadelphia: Lea Brothers & Co.

The Regimen to be adopted in Cases of Gout. By Dr. Wilhelm Ebstein, Translated by John Scott, M.A., M.B. London: J. & A. Churchill.

A System of Practical Medicine by American Authors. Edited by Wm. Pepper, M.D., LL.D., assisted by Louis Starr, M.D. Vol. II. Philadelphia: Lea Brothers & Co.

Hay Fever and its Successful Treatment by Superficial Alteration of the Nasal Mucous Membrane. By Charles E. Sajous, M.D. Philadelphia: F. A. Davis, Atty., Publisher.

On Some Common Injuries to Limbs: Their Treatment and After-treatment, including bone-setting (so-called). By Edward Cotterell, M.R.C.S. (Eng.), &c. With Illustrations. London: H. K. Lewis.

Diagnosis and Surgical Treatment of Abdominal Tumors. By Sir Spencer Wells, Bart. London: J. & A. Churchill.

The Curability and Treatment of Pulmonary Phthisis. By S. Jaccoud. Translated and edited by Montagu Lubbock, M.D. (Lond. & Paris), M.R.C.P. (Eng). New York: D. Appleton & Co.

Berlin as a Medical Centre. A Guide for American Practitioners and Students. By Horatio R. Bigelow, M.D. Sandy Hook, Ct.: New England Publishing Co.

Society Proceedings.

ONTARIO MEDICAL ASSOCIATION.

The fifth annual meeting of the Ontario Medical Association was opened at the Victoria Hall, London, Ont., on Wednesday the 3rd inst. Dr. Worthington of Clinton, President, in the chair.

After the minutes of last session were read and approved, the report of the Committees on Arrangements and Credentials were presented and discussed. The remaining business of the forenoon session was of a purely routine character.

The first business on the programme for the afternoon session was the reception of guests and delegates. The President cordially invited Dr. Jenks of Detroit and Dr. Stewart of Montreal to take seats on the platform.

Dr. Pope of Bothwell exhibited a boy, aged 15, who, since the first of January last, has been suffering from what he believed to be a form of epidemic cerebro-spinal meningitis. The case is particularly remarkable for its long course, high temperatures, and the paralytic condition of the lower limbs. For a period of two weeks, at the beginning of the trouble, the temperature was constantly in the immediate neighborhood of 105°F., while for 24 hours it remained at 107.5°. The pulse during this period of hyperpyrexia varied from 150 to 160 per minute. The temperature at the present time is frequently found elevated from one to two degrees during some, but no regular, periods of the twenty-four hours. There is a marked loss of power in both lower extremities, but especially of the right. The patellar reflex in both limbs is abolished. There are no urinary or rectal disturbances, however.

The President showed a woman, aged 40 years, who was suffering from what was considered to be neuralgia of the tongue.

Dr Worthington then delivered his presidential address, his subject being "The Cold Water Treatment of Fevers." Before entering upon his subject, he tendered the members of the Association his sincere thanks for the honor they had paid him in electing him as their president. He could say that no honor ever conferred on him had been so highly prized, and he thought

justly prized, as there was no profession in which there was such a vast field for scientific research—in which discoveries of such magnitude have been made for the benefit of the human race, from which they were receiving such marvellous revelations through the untiring labors of specialists—and in which inexhaustible fountains for observation still exist. The learned speaker then went on to contrast the treatment of disease at the present day with what it was about a hundred years ago, dwelling especially on the marked contrast in the treatment of fever then and now. A graphic picture was drawn of the blindness and folly of the physicians of the early decades of the present century in throwing away the thermometer and the cold douche introduced by Currie of Liverpool now over one hundred years ago. The President concluded his excellent address with the hope and the assurance that these means so powerful for diagnosis and treatment would remain forever with us, and that to them would soon be added other measures through which we would be in a position to deal more telling blows against the fevers that yearly carry away such large numbers of our population.

The SECRETARY read a telegram from J. T. Reeves, Secretary of the Wisconsin State Medical Society, in session at Milwaukee, conveying the greetings of this Society to the Association, and wishing it every success. The message was received with applause, and Dr. Oldright instructed to send a suitable reply.

Dr. BRAY of Chatham read an account of a case of labor where it was necessary to resort to Cæsarean section in order to effect delivery. The patient had a distorted pelvis, caused by fracture of the right ilium.

Dr. JENKS of Detroit, who performed the operation, gave in detail the different steps of the procedure he adopted. The woman lived 48 hours after the child had been removed.

Dr. TYE, of Chatham, read an exhaustive paper on the "Etiology and Treatment of Diphtheria." After describing and laying stress on the preventive treatment, he dealt with the subject of the relation between membranous croup and diphtheria. Dr. Tye considers that far too much stress is laid

on the local treatment of this disease by physicians in general. He looks upon the constitutional treatment as the most important. The remedies commonly employed at the present time were then passed in review.

The reading of this able paper was followed by a lively discussion, in which Dr. Graham, of Toronto, and a number of others took part—some contending for the superiority of local, while others looked upon the constitutional treatment as the most important.

The next paper read was one on the "Continued Fevers of Western Ontario," by Dr. Fraser, of Sarnia. Dr. Fraser considers that typho-malarial fever is not a distinct disease, but simply typhoid fever slightly modified by malarial influences, and with which view the majority of the speakers who took part in the discussion agreed.

The first event of the evening session was the introduction, by the President, of Dr. Parks of Buffalo to the members of the Association.

The SECRETARY read a communication from Dr. McLean, of Detroit, wishing the Association every success, and extending to all members a warm invitation to attend the meating of the Michigan State Medical Society, which will be held at Port Huron on the 10th and 11th instant. The Secretary was requested to write to Dr. McLean, thanking him for his letter, and stating that many of the members would be glad to accept his kind invitation.

Dr. POWELL, of Edgar, read a paper on "Plaster Splints." He exhibited a large number of different forms of these appliances. With respect to materials, he advised that only the finest and freshest dental plaster should be used.

Dr. HOWE, of Buffalo, then read a carefully prepared paper on "Blindness occurring during Pregnancy," in which he attempted to prove, 1st, That pregnant women are liable to an impairment to vision, which, though generally temporary, may become permanent; 2nd, That this is due to albuminuric retinitis; 3rd, That the danger to vision alone is sufficient, in certain cases, to warrant the induction of labour. Dr. Howe

illustrated his paper by diagrams thrown on a screen, showing the different stages of the pathological changes going on in the retina. He looks upon amaurosis occurring before the seventh month as permanent, if premature labour is not induced; while those cases happening later on, especially during the last two weeks of pregnancy, are recovered from even when the normal course of events is not interfered with.

A very practical paper on "Urinary Calculi, and the best method of dealing with them and the causes that give rise to them," was read by Dr. Groves of Fergus, who has had a very extensive experience in these cases.

The last paper of the evening session was on "Placenta Prævia," by Dr. Edwards, Sr., of London. He gave the details of seven cases that he has met with in his own practice, and the way in which he dealt with them. The reading of this paper was listened to with keen interest by many members present.

Second Day.

The first paper in the forenoon session of the second day was one on "Intra-Uterine Medication," by Dr. Temple, of Toronto. Dr. Temple dealt with his subject in a very thorough and exhaustive manner. Although strongly impressed with the necessity of active local measures in many uterine troubles, he warned the members not to neglect constitutional means of relieving these disturbances.

The discussion which followed this paper was taken part in by Drs. Holmes of Chatham, Roseburgh of Hamilton, Gunn of Brucefield, Powell of Edgar, and Adam Wright of Toronto.

Dr. Edwards, of London, exhibited two brothers, aged respectively 12 and 14 years, both the subjects of pseudo-hypertrophic paralysis in an advanced stage. In both cases the first marked symptoms of the disease showed themselves when the patients were eight years of age, and they have steadily progressed up to the present. The boy aged 14 is quite unable to stand or perform any movements. The muscles of all the extremities are atrophied. This atrophy is not specially marked in any muscular groups. The calves, which were for-

merly greatly hypertrophied, are now smaller than they normally should be. The patellar reflexes are absent. There is no bladder or rectal paresis. The younger of the two brothers is still able to walk a few steps, but with the greatest difficulty. His calves are much hypertrophied, as are also the muscles of both forearms, while those of the upper arms are in an atrophic state, but not markedly so.

The members of the Association took a great interest in the examination of these remarkable cases.

Dr. Brodie, of Detroit, President-elect of the American Medical Association, who was present, received a cordial reception from the Association, and was invited by the President to take a seat on the platform. In returning thanks, Dr. Brodie expressed the pleasure he felt at meeting so many professional brethren on this side of the river, and regretted that he had been unable to be present on the first day, as he had intended. He invited those members of the Association who could spare the time to be present at the annual meeting of the Michigan State Medical Society, which opened in Port Huron on the 10th instant.

On the afternoon of the second day, the Association, on account of the very large number of papers still unread, decided to divide into medical and surgical sections. Drs. Graham and Aikins of Toronto were named chairmen of these sections.

In the medical section, the first paper read was by Dr. Henderson of Kingston, on "Pulmonary Cavities." Dr. Henderson gave a rapid survey of the modern pathology of tuberculosis, including a description of the character and relations of the tubercle bacilli.

Dr. Owens of Arkona then exhibited a man, aged 21, affected with *Epileptiform Tic* of eight years' duration.

Dr. Arnott of London read a very suggestive paper on "The influence of proper diet in the treatment of disease."

Dr. Graham of Toronto read a paper on "Mitral Stenosis." He specially insisted on the frequency of the occurrence of this form of cardiac lesion, and on the seemingly great ignorance that prevails in the profession with regard to it. He gave an account

of several cases. These all illustrated the usual sudden termination of cases of this kind, death being nearly always due to embolism.

Dr. Duncan of Thamesville read a very thoughtful and well prepared paper on "The use of Warburg Tincture in Canadian Practice."

In the surgical section, the following papers were read :—

"Intestinal Obstruction,' by Dr. Atherton of Toronto.

"Treatment of Abortion," by Dr. Adam Wright of Toronto.

"Hæmorrhage after Abortion," by Dr. Murray of Thorndale.

"Foreign Bodies in the Larynx," Dr. Harrison of Selkirk.

"Straight Splints in Elbow Fractures of Childhood," by Dr. White of Toronto.

"Uses of Cocaine in Diseases of the Eye," Dr. Reeve of Toronto.

The special committee appointed to answer the questions submitted to the Association by the Ontario Women's Christian Temperance Union presented the following report :

1. Is the beverage use of alcoholic liquors by persons in health beneficial? Answer—No.

2. Is the indiscriminate use of alcoholic liquors by persons not in health beneficial? Answer—No.

3. Is alcoholic liquor, as obtained in common sale, necessary in medical prescriptions; if so, in what cases? Answer—No; except in cases of emergency.

4. What ought to be the attitude of the medical profession towards the sale of intoxicants? Answer—The medical profession is opposed to the indiscriminate sale of alcoholic liquors.

The report was taken up clause by clause, and, after considerable discussion on clause 3, was finally adopted as a whole.

The committee on Necrology reported that since the last annual meeting of the Association several members of the profession had joined the silent majority, and have all left an honorable record of faithfulness, ability and integrity behind them. Of these, mention was made of the late Drs. George Willcox of Toronto, Thomas C. Howe of Dundas, Lorne C. Campbell of Port Arthur, O. T. Heartwell of Dunnville, John Small of Toronto, and C. P. Mulvany of Toronto.

The committee on Nominations recommended that the following be appointed officers for the ensuing year :—

President—Dr. Tye of Chatham.

Vice-Presidents—Dr. Arnott, London ; Dr. Temple, Toronto ; Dr. Hilliary, Aurora ; and Dr. Henderson, Kingston.

General Secretary—Dr. White, Toronto.

Treasurer—Dr. Graham, Toronto.

Corresponding Secretaries—Dr. Adam Wright, Toronto ; Dr. Campbell, Seaforth ; Dr. Aylesworth, Collingwood ; and Dr. Mitchell, Enniskillen.

The report was adopted.

It was decided to meet next year in Toronto.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, April 3rd, 1885.

E. H. Trenholme, M.D., 2nd Vice-President, in the Chair.

Dr. Stewart exhibited the patient, and read the following account of a case of *Tabes Dorsalis* with exaggerated patellar reflex :—

The patient (a man), who is 42 years of age, complains of dimness of vision, flatulency, and of shooting pains in various parts of his body. He dates his troubles to a "cold" which he contracted three years ago. Among the first symptoms he noticed were the darting pains which have troubled him with more or less severity ever since. Two and one-half years ago he suddenly became aware that he saw objects double, and on shutting his right eye he was surprised to find that the vision of his left was markedly diminished. This diminution in the vision of the left eye steadily progressed until a few months ago, since which it has remained stationary. During the past five or six months there has been a steady and progressive diminution in the vision of his right also. He injured his back a few years ago, but neither at the time nor afterwards does it appear that he suffered in any particular way from this injury. In 1875 he had two sores on his penis, but there is no positive evidence whatever that those sores were of an infecting charac-

ter; otherwise, his past history was unimportant. There is nothing of importance to be derived from the family history.

His present condition is as follows:—There is no paralysis or atrophy of any of the voluntary muscles—their mechanical, faradic and galvanic irritability are normal. All the superficial reflexes are more or less exaggerated with the exception of the plantar. The cremasteric reflex is especially exaggerated. The patellar reflexes are exaggerated, as are also the triceps reflexes, but only to a slight extent compared with the patellar. The organic functions of defecation and micturition are considerably interfered with, while the swallowing reflex is normal. Shortly after urinating he is able, by "pressing hard," to pass a number of ounces of urine. That the sphincter of the bladder suffers as well as the detrusor is shown by the fact that when the desire to urinate comes on, unless he is ready, the urine floats away in spite of all his voluntary efforts to retain it. Although not troubled with constipation, he has difficulty in expelling the contents of the rectum. The "shooting pains" which trouble him are, for the most part, situated in the lower extremities. Sometimes, however, they have their seat in the hands, arms, trunk, face, neck, and even the ears. He has no delayed sensations, but he frequently experiences a sensation as if some one was pinching him or pulling from within outwards—a pain through his skin. There is no inco-ordination or disturbance of the muscular sense.

Dr. Buller's report of the condition of the eyes:—"Argyl-Robertson Pupil.—There is a very considerable atrophy of both optic nerves, with great limitation of the visual fields, especially of the left. The nerves are pale and of a blue-gray color. The blood-vessels are very small. There is no evidence of a previous inflammatory condition." The functions of the remaining cranial nerves are normal.

Dr. STEWART remarked that there was no doubt that the man was suffering from tabes dorsalis, despite the fact of the marked exaggeration of the patellar reflexes. There were present two of the three characteristic symptoms of this disease—the lightning pains and the reflex immobility. In addition there was

the optic nerve atrophy, the temporary diplopia, together with the bladder and rectal symptoms, forming a combination of symptoms that, at least up to the present, have only been described under the head of that myriad-sided disease, tabes dorsalis. Absence of the patellar reflex, Dr. Stewart remarked, is looked upon as one of the most important and earlier symptoms of the disease. A few cases have been recorded where it has not been absent, but up to the present time he had not read of any case where it was exaggerated. On theoretical grounds it had been suspected that, preceding the stage of loss of patellar reflex in the tabes, there is a period when it is exaggerated. Even were this supposition true, it would not aid us at all in this case, for it is one of considerable standing, although still in the pre-ataxic stage. The increased reflexes cannot be explained by disease of the lateral column, for there is an entire absence of any increased tonicity, this symptom being, next to the exaggerated reflexes, the most trustworthy evidence of a sclerosing of the pyramidal strands. Dr. Stewart concluded by stating that the honor of having made the diagnosis was Dr. Buller's, and it was owing to Dr. Buller's kindness that he was enabled to present him to the Society.

Dr. Henry Howard said that the expectation of mental symptoms depended on whether the lesion begins high or low in the cerebro-spinal system, for in descending lesion death takes place before any dementia occurs. Hence, the important point is to know what centres are affected, and whether these be above or below the reflex centres usually implicated in tabes. Here it is interesting that the cortical substance having been involved some years, there is yet no impairment of mental powers.

Dr. Campbell said that owing to the better knowledge in general, and especially of ophthalmoscopic signs, cases of this disease were now detected which formerly escaped diagnosis; but he did not believe such cases occurred with greater frequency to-day. He spoke of a case (which had been seen in consultation), by Dr. Trenholme, in which a woman evidenced exaggerated sexual desire, and subsequently became insane.

In answer to Dr. Trenholme, Dr. STEWART said death was often due to exhaustion from the pains.

Dr. H. HOWARD said that pneumonia was sometimes a cause of death, due to implication of pulmonary trophic centres and respiratory tract.

In answer to questions as to treatment, Dr. STEWART said though there was little evidence of syphilis, he had put his patient on anti-syphilitic treatment. Electricity is useful to control the pains. The flatulence was thought part of the disease, due to paresis of intestinal muscles.

Some discussion as to the use of ergot in tabes followed, and Seguin and Althaus were quoted in support of its use. Dr. STEWART said that it was perhaps dangerous, as ergotism caused an apparently genuine tabes.

In reply to questions as to etiology, Dr. STEWART said symptoms, especially eye symptoms, no doubt preceded injury and heat, etc., referred to.

Dr. REED called attention to disturbances in the function of urination as early symptoms in tabes.

Dr. REED spoke of *second attacks of measles* in same patient, and spoke of two such recently observed by him.

Dr. CAMPBELL said he had seen at least six such cases, and, much more extraordinary, had seen scarlet fever recur within a few weeks of first attack. He also spoke of the severity of the complications in the present epidemic of measles, as pneumonia, pleurisy, etc.

Dr. KENNEDY followed to same effect, and cited a case where scarlet fever, measles and whooping-cough were interchanged among the children of one family. Dr. Kennedy also spoke of a case where he diagnosed measles ten days before the development of rash, owing to catarrhal symptoms and a prodromal rash.

Dr. CAMPBELL spoke of whooping-cough frequently following measles in this epidemic. He advised treatment with quinine, with cures *in every case* within five or six weeks. He said the theory was that the spores deposited on fauces kept up irritation, and the quinine by causing profuse secretion led to these germs being washed away. This being the theory, the practical point is that the treatment by quinine is very successful.

Dr. REED said that Henoch found that "the measles usually followed whooping-cough, and that quinine had failed in his hands, he finding morphia most efficient."

Dr. TRENHOLME said that, in his hands, Drosera Rotundifolia (Parke D. Extr.) and Eucalyptus had done good service in whooping-cough.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

The Treatment of Ruptured Perineum by Iodoform.—The *London Medical Times* says that a recent number of the *Zeitschrift fur Geburtshulfe und Gynakologie* contains an article by Dr. C. Behm on the above subject. He points out that in the region of the vagina and perineum the efficient application of the ordinary kinds of antiseptic dressing is very difficult if not impracticable, on account of the unavoidable fouling of them by urine and fæces. Iodoform has the property of closely adhering to wound surfaces, over which it forms a felt-like covering, difficult of detachment. It is, therefore, peculiarly suited to the needs of the ano-vulvar region. The method which Dr. Behm recommends, is the painting the surface of the wound with "iodoform-collodion" (iodoform one part, flexible collodion ten parts). He believes that the protective film thus formed does not act as a foreign body, and prevent primary union, but that, on the contrary, by checking secretion, it favors this mode of healing.—*New York Medical Journal.*

The Third stage of Labor: Obstetric Hints.—By J. SAVAGE DELAVAN, M.D.—As soon as the child is in the world, *I place my hand on the abdomen of the mother*, grasping, gently but firmly, the contracting uterus, only relinquishing my grasp on finding contraction taking place. Then I request the nurse to place her hand where mine has been, directing her how to apply it. I then sever the funis between two ligatures, and again relieving the nurse, continue, gently, the kneading process. If this is properly done, in a short time the uterus will be found firmly contracted. I then

discontinue my manipulation, not following entirely the method of Crédé, by keeping up the kneading until the placenta is expelled from the vulva; but, finding the uterus contracted, I introduce my right hand into the vagina and find the placenta, which I carefully and slowly withdraw, winding and turning it in my hand, so that the membranes are twisted into a rope and come away intact. Before disposing of the mass it should be carefully examined to see that no portion is retained. I then seat myself by the bed, and with the left hand keep up gentle but firm pressure with manipulation for *at least* half an hour, at the end of which time I sweep the vagina with my right fore-finger, to clear it of clots and to see that no portion or shred of membrane remains either in the canal or the uterine mouth. Finding the womb hard and firmly contracted, *I then, and not till then*, apply the binder, folding a napkin saturated with spirits and placing it over the uterus under the bandage. When the binder is applied, I have the soiled clothing removed, place the patient in a comfortable position, the head not too high, and then—what? Go home? No. I wait *religiously* another half hour. Then, if the pulse is normal, as it should be, and the napkin which has been placed at the vulva after the bandage is applied shows that there is no hemorrhage, I leave my patient, instructing the nurse to put the child to the breast as soon as the mother is rested, and order some light nourishment to be administered in an hour.

The hour spent at the bedside *after* the birth of the child will save many a sudden summons, many an anxious moment. There is *always* danger to the parturient woman until the emptied uterus is firmly *permanently* contracted, and the physician who leaves the patient immediately after the delivery of the secundines, and trusts to nature to accomplish the rest, fails in his duty, and will, sooner or later, bitterly repent his negligence. Remember this: "*No one has a right, with our present knowledge, to lose a life from hemorrhage from the uterus, immediately after confinement*,," and if the means I have described are taken, post-partum loss of blood will be of rare occurence.—*N. Y. Med. Times.*

CANADA

Medical and Surgical Journal.

MONTREAL, JUNE, 1885.

THE NEW BUILDING OF THE MEDICAL FACULTY OF McGILL UNIVERSITY.

We are quite sure our readers will be pleased to hear that the continually increasing success of the Medical Faculty of McGill University during the past few years has been so great as to render the large building at present occupied by them altogether too small for teaching purposes. In consequence, the Faculty have now in course of construction an annex larger than the present building, which will greatly increase the facilities for all the classes. As it is now, the Faculty building is much larger than any other Medical College in the Dominion. When the annex is completed, and the extensive alterations contemplated in the old building have been made, it will be one of the largest and most complete on this continent. A student of former years will be unable to recognize the inside of the building in which he studied, as the only rooms existing then and now are the library and museum, and these, too, have been added to. Some idea of the size of the whole structure, complete, can be formed from the fact that the main hall on the first floor will be 136 feet long, with a room 28 feet long at the end of it, giving a total length from front to rear of 164 feet; also by the fact that the building covers 13,930 square feet. Accompanying this will be found a plan as taken from the College calendar.

For those interested we give a description of the entire building:—

Ground Floor.—The library, which is a very extensive one, containing over 10,000 volumes, will now consist of two rooms, the additional room being 30×22, and opening off the present

one. On the opposite side of the hall is the museum, which will now be connected with an extensive additional room by a small chamber—in this way almost doubling its present capacity. In the latter, the curator will have facilities for his special work. Continuing along the main hall, the second door we come to on the left will be the entrance to the pharmacological laboratory. This room is to be specially fitted up for demonstrating, experimentally, the actions of drugs, as well as for giving courses on practical pharmacy. On the opposite side of the hall is the students' reading-room, which is to be comfortably fitted up. Next to the reading-room is the private room of the Professor of Physiology. This is chiefly for the purposes of the experimental work of the professor himself. Here, also, will be kept the valuable apparatus of this department, which has been extensively added to, and is now thoroughly efficient. This opens into the physiological laboratory, which is the next room to the right. Here the students will themselves take an active part in the physiological work, just as in the adjoining chemical laboratory they study chemistry practically. The chemical laboratory will have accommodation for seventy-five students, all engaged in the practical work of this subject. Here every convenience is provided for enabling the student to pursue this special work. Opening off the laboratory is the "balance room" and private room for the Professor of Chemistry. On the opposite side of the main hall is the large lecture theatre for the classes on these two branches. This room is hexagonal in shape, and its widest part measures 76 feet. It is lighted by a skylight, and three windows to the rear of the students, which also serve admirably for ventilating purposes. It will seat comfortably 275 students. Beneath the higher seats are four rooms, each 8 feet high and 10 feet wide. The Professor of Therapeutics will occupy the first two rooms, one of which will be for the convenient performance of his duties as Registrar. The Professor of Chemistry will use the other two rooms for physical apparatus and also for private experimental work.

Second Storey.—Opposite the main staircase is the dissecting-room. This will be now 72 feet long, and will be pro-

vided with 20 tables. The room will be splendidly lighted—by daylight from two skylights, as well as windows from three points of the compass ; and at night there will be both electric lights and gas. Opening off the dissecting-room is the bone-room. This will have a large table in its centre and seats, will be well supplied with bones, and will be a convenient place for the study of osteology. Opening off the bone-room will be rooms for the Demonstrator and his assistants.

Turning sharp to the left after ascending the main stairway, the first door we come to is the entrance to a small lecture-room or theatre for demonstrating purposes. This will be used for pathological and other demonstrations to at least fifty students at a time. Close to the door of this theatre is one of the entrances to the histological laboratory, the other entrance being to the right of the head of the stairs. This laboratory will have, commencing about its centre, a stage two feet six inches high, reached by three or four steps, on which will be two tables extending across the room. Behind this will be another of a similar heighth, and arranged in the same manner. Each of these tables will have three or four microscopes. There will also be four tables ten feet long, with microscopes, on floor level. This arrangement of stages is to prevent students standing in front of the tables from obstructing the light of those using the microscopes. This laboratory will be furnished with thirty microscopes, also microtomes and other apparatus for practical work.

In the annex on this flat will be a large lecture-room, capable of seating comfortably 300 students. Its measurements are 56 by 46. This theatre will be utilized as the anatomy lecture room, besides other purposes. Separate entrances are provided for the students. The Professor of Anatomy will have his room opening off this theatre. Beneath the higher seats will be rooms eight feet high and twelve feet wide at narrowest part. Their occupants have not yet been decided upon, but will be so arranged that the Pathologist of the College can utilize what he may require. He will also have the room to which his name is attached in the accompanying plans. In the basement of the building will be a cloak room for students.

All the work is being most substantially performed, the east and south faces of the annex being built of stone, the rest of brick. It will be well heated, every regard being had for the comfort, as well as the educational requirements of the student. The contractors undertake to have the work completed by the 15th of September, so that the Faculty will commence work on the 1st of October with facilities unequalled in Canada.

THE INTERNATIONAL MEDICAL CONGRESS.

The action of the American Medical Association at New Orleans bids fair to jeopardize the success, if not the existence, of the congress to be held in Washington in 1887.

The facts of the case, so far as we can learn, are as follows: At the Washington meeting of the American Medical Association in 1884, a committee of seven was appointed by the President to "extend, on behalf of the medical profession of the "United States, to the International Medical Congress about to "meet in Copenhagen, a cordial invitation to have the next In-"ternational Medical Congress meet at Washington in 1887," and to this committee was given full power to add to their membership and to perfect the organization. The invitation was tendered and accepted, and, as we understand it, the committee was entrusted by the Executive of the Copenhagen meeting with the care of organizing the next Congress. It became *de facto* a committee not of the American Medical Association but of the profession, deriving its existence from the International Congress and no more responsible to the American Medical Association than to the American Academy of Medicine. In this way only is the organic continuity of these international congresses maintained; each executive appoints its successor, and the committee nominated at Copenhagen is the descendant of the committees which organized the previous meetings. Believing that it had full powers to act, the committee added 18 or 20 members, chosen rather on professional than geographical grounds, and, at a meeting in November, appointed the officers of congress and arranged the sections. A pamphlet giving the details of

organization and a list of the officers of the various sections was issued this spring, and widely distributed in Europe. At the New Orleans meeting, Dr. Billings reported progress on behalf of the committee, but the Association expressed its decided condemnation of the work already done and nominated thirty-eight additional members to take the place of those selected by the original committee of seven.

It is a great pity that Dr. Billings did not then and there assert the independence of the committee, once having been entrusted with power from the Executive of the Copenhagen Congress. The additional thirty-eight men nominated by the Association may be representatives territorially, but certainly not of the profession, as were those nominated by the committee of seven. With the exception of eight or nine, they are unknown men. Among the officers who were appointed by the committee are several prominent New York physicians, who, on the Code question, are not in harmony with the American Medical Association, and this seems to have been a special offence. Nothing illustrates more forcibly the necessity of the Executive of the Congress being absolutely independent of the Association, for, if controlled by it, there will be men of great prominence in the profession excluded from participation on account of this wretched Code quarrel—men who, if the Congress was in any other country, would be cordially welcomed. The new committee has, we learn, decided to meet in Chicago at an early day, and it is to be hoped the members will see the false position in which the Association has placed them and quietly discharge themselves. It is for the original committee now to determine whether the meeting in 1887 shall be under the wing of the American Medical Association, or whether it shall be truly an International gathering, managed and controlled by representatives of the medical profession of the United States. Upon their determination rests the success or failure of the Congress.

There can be no doubt, as the *New York Medical Journal* says, that the Association was forced into taking this action by some notorious wire-pullers who were discontented at not having been placed in office. The presence of some of these men on

the new committee is the most objectionable feature about it, and will assuredly alienate the support and sympathy of the very men of the profession who are most needed to make the Congress a success.

Montreal General Hospital.—On the 21st ultimo the Governors of the Montreal General Hospital held their annual meeting for the appointment of officers for the ensuing year. The proceedings were of more than usual interest—Dr. Osler's resignation as an attending physician having been already accepted, it became necessary to fill the vacancy. The candidates between whom the election lay were Drs. Richard MacDonnell and F. W. Campbell. The result proved highly favorable to the former, Dr. MacDonnell receiving 93 votes against 71 for Dr. Campbell. We congratulate Dr. MacDonnell upon his well-deserved promotion, and the Governors upon having secured to the staff the services of a young, capable, energetic and zealous physician.

By-laws having been recently passed providing for the appointment of a Gynecologist and a Laryngologist to the Hospital, the positions were filled by the election of Drs. W. Gardner and G. W. Major respectively.

Drs. MacDonnell, Gardner and Major having all been on the staff as assistant physicians or surgeons, three vacancies were created. These were filled as follows :—For Assistant Physicians, Drs. A. D. Blackader and F. W. Campbell; for Assistant Surgeon, Dr. James Bell. Dr. W. R. Sutherland, who was also a candidate, was only two votes behind Dr. Campbell.

Medical Health Officer.—The Board of Health have received and accepted the resignation of Dr. Larocque, Health officer for the city of Montreal. Steps are therefore being taken to provide his successor. It is a very important appointment, and it is to be sincerely hoped that some medical gentleman will be selected who will do credit to himself and to this great city. A point which should not be lost sight of in making a definitive appointment is, that the person chosen should be one

who, from his general standing and previous record is held in respect by the large body of medical practitioners of the city, will be acceptable to them, and will command their loyal assistance in his endeavors to ameliorate the sanitary condition of our city. The Board have formed an advisory committee from members of the different medical schools in the city, and it is to be hoped that, with the assistance of these gentlemen, a conclusion may soon be reached. The salary now offered ($2,500) ought to be sufficient to bring out a capable man, and we have no doubt that, if he proved himself the right man in the right place, this would be increased.

—It is pleasant to find some of our hard-working physicians occasionally seeking relaxation in the lighter paths of literature. Our friend, Dr. John Campbell, of Seaforth, Ont., has always been noted as possessing a *penchant* for sharing his thoughts with his fellow-man either in written words or in one of his own peculiar and stirring addresses. He now presents us with a little volume which will interest a large circle of readers. It is called "The Land of Burns," and consists of a series of letters addressed by him to his local paper from Scotland, where he was enjoying a well-earned holiday. They all bear the stamp of his own fresh and enthusiastic nature, and are written in a pleasing and racy style. We hope the worthy doctor's modest venture will meet with a large demand.

—The fifth annual meeting of the Ontario Medical Association, which was held in London on the 3rd and 4th inst., was the most successful meeting hitherto held of this young and vigorous body. The attendance, which was upwards of 100, included representatives from all portions of the Province—from the east, from the west, from the north and south. Cities, towns and villages had their representatives. And yet many places were unrepresented. More than one place which delights to call itself a city, within an hour's journey of London, had no medical man to represent them. This state of affairs should not be. This is not the first occasion on which it has happened. It always happens, and it always will happen as long

as the present apathy exists on the part of so many. Dr. Worthington, of Clinton, the President of the Association, filled his high position with credit to himself and his profession. His address was full of sound philosophical teaching. His suggestions for a more rational and scientific treatment of pyrexia are worthy the earnest attention of all practitioners. Dr. Tye of Chatham was elected President for the ensuing year. We congratulate Dr. Tye on this mark of the esteem in which he is held by the profession throughout the Province. The Association is fortunate in its choice, for Dr. Tye has all the qualities, in an eminent degree, which are necessary to fill this important position with success.

Ontario Medical Council.—The first meeting of the recently elected Council was held in Toronto on the 9th inst. The following officers were elected:—President, Dr. D. Bergin, Cornwall. Vice-President, Dr. Douglas, Port Elgin. Treasurer, Dr. W. T. Aikens, Toronto. Registrar, Dr. Pyne. Dr. Burns gave notice of motion that the lowest standard of matriculation examination for the Medical Council of Ontario, hereafter, be the Arts examination of Toronto University.

The Militia Medical Service.—The following letter to the *Canadian Militia Gazette* raises a question which is of interest to many of our readers. When we shall have learnt something from the medical officers now on service in the North-West of the working of the present system, we shall be in a better position to judge of the comparative advantages of the two systems alluded to by Dr. Tobin:—

To the Editor of Canadian Militia Gazette.

Dear Sir,—I should think it would be of interest, at present, to medical officers serving with the troops at the front, and throughout the Dominion, if you would devote a space in your columns to a discussion of the relative merits of the regimental and departmental medical systems. As an army surgeon of some ten years service, I have had, in my time, experience of both. My experience as a militia surgeon dates only from the beginning of the present campaign. I have no opportunity, therefore, of ascertaining the views of my militia confreres on this subject, but think the present time opportune and the columns of your paper appropriate for the discussion. At all events, I have no doubt, this campaign will have

opened the eyes of most of us to the necessity of reorganization. Should this take the form of the departmental system now prevailing in the British service? It has been found, in war time, that the pure regimental system is a failure. But has it not proved so on the present occasion? Of course our regimental hospitals have not been properly equipped as such; nor have our field hospitals (such as I have seen of them at least) been put upon a proper footing; but would not a well organized departmental service have been more efficient, more movable and cheaper than the present one? With a surgeon-general at Ottawa as head of the department, one deputy-surgeon-general for each province, with a suitable staff of surgeons-major and surgeons under him (transferable on duty as required from one point to another within the province, from one corps to another, and available for home and foreign service), we would have a simple, cheap and readily movable staff, possessing more authority, independence and *esprit de corps* than can ever be obtained under the present system. I only throw out these ideas hoping to obtain a ventilation of the subject, and, having nothing but agreeable reminiscences of both systems whilst in the home service, consider myself as quite unprejudiced in the matter.

Yours sincerely,

W. TOBIN, F.R.C.S.I., Surgeon Halifax Batt.
Late Surgeon A. M. D. and late Assistant Surgeon H.M. 24th Regt.

Camp, Medicine Hat, 21st May, 1885.

Medical Items.

DISFRANCHISING DISPENSARY PATIENTS.—The English Government has passed a law disfranchising all English voters who have accepted medical relief from the parish. This, throughout England, will bar probably 200,000, or one-tenth of the whole number of voters.

—Some one, imbued with the spirit of the Arabian Nights, has observed that there are men walking about in Germany without viscera, or with but a fractional part of the proper anatomical amount. Metres of their intestine have been resected; their spleens have been removed; one kidney has gone; they have neither pylorus nor gall bladder.

—A lady in a leading town in the Dominion consulted an itinerant professor of medicine regarding her defective vision. She paid her $1 entrance fee to the show for the privilege of speaking to the "Doctor." He informed her she was rapidly losing her sight, but shewed her a little bottle which he said would positively cure her. Price only $10. This staggered her. She immediately resolved to "go it blind."

—The following story is told of the celebrated Oppolzer: Shortly after his arrival in Vienna he was consulted by an invalid, whom he advised, after a somewhat hasty examination, to go to Pistyan, in Hungary, and take the waters. After several months the man, whom the professor had forgotten, again presented himself, with an aggravation of all his symptoms, and said he had just returned from a course of the Pistyan waters. The professor examined him, this time rather more carefully, and then, with some wrath, asked him what confounded ass had advised him to go there, as it was the worst thing he could possibly have done. Moral: Always speak well of your neighbor.

A Medical Student aged Seventy-four.—Our Berlin correspondent writes:—It is not often that one hears of a student of the age of seventy-four taking a degree at a university. The "bernoostes haupt" is sometimes to be seen at German universities, but he is generally a man who has spent his last years in idleness. The Nestor of the Berlin students to whom I now refer has been studying at Berlin since 1881, and has just taken a degree of Doctor of Medicine. The professors addressed him as "worthy colleague," the students as "papakin." In 1833 he was matriculated at Berlin and studied theology till 1837, and spent his time from then till 1881 as a missionary in South Africa. It had been his wish all his life to study medicine, but pecuniary difficulties stood in his way. Now that he has passed his examination, having worked with all the zeal of a young student, he is going to return to Africa, where he will practice medicine.—*Brit. Med. Jour.*, March 7.

Sweating to Death.—Such an unusual case as that which Dr. Myrtle reports in the *British Medical Journal*, is worthy of comment. The patient, a healthy, active man, after suffering for three weeks from pain of rheumatic character, relieved by sodium-salicylate, was seized with profuse sweats, frequently of most offensive character, and lasting at times for ten hours. Atropine and ergotine both caused sudden symptoms of collapse. He improved for a time on arsenic, and the

perspiration lost its fœtor. He died from exhaustion 121 days after he had first felt the flying pains. No necropsy could be obtained. Dr. Myrtle regarded the case as one of paresis of nerves supplying the sweat-ducts, caused by frequent exposure to cold during his employment. Dr. Braithwaite, Dr. Hutchinson and Mr. Wheelhouse related cases of excessive sweating, which in one instance was relieved by the external application of belladonna-liniment, and in another by taking copper-sulphate. Dr. Jacob thought the intermittency of the attacks precluded a peripheral paresis, and pointed rather to the sweat-centres being affected.

Hypodermic Injection of Cocaine.—M. Dujardin Beaumetz has been using with success hypodermic injections of cocaine in such minor surgical operations as the opening of an abscess. He insists upon the maintenance of the lying position on the part of the patient, injections in the standing or sitting position being usually followed by faintness. The dose injected by him has been 1 ccm. of a solution of the strength of 1-50th per cent., and the sedative action from this dose has usually been apparent in from 5 to 10 minutes.—*Progrès Médical*, *March* 21, 1885.

—An English clergyman having vaunted the curative power of shelled snails for eczema, the following recipe is sent to the *Medical Times:*—Take of common or garden clergymen—who must not be confused with the sentimental and inferior hedge parson—as many as require the treatment, tear off or carefully remove all the skin and nails, rub them well over the gravel walk in sight of the living creature which they have proposed to torture in order to provide a quack remedy for skin diseases. This will give relief to the Snails, and will cure the clergymen of their disregard for the feelings of your obedient servant, Helix Nemoralis.

—Dr. Furber, writing from Kansas to the *Eastern Medical Journal*, says that the surgical mania of his State is spaying of women and young virgins. He says that in his waking hours he often dreams of a courting scene in which the conversation runs thus: "Miss Doolittle, have you been spayed?" "Sir?" "Have you undergone ovariotomy?" "Please ex-

plain yourself, Mr. Blunt." "I desire to be informed, Miss Doolittle, whether or not you have been oöphorectomised?" "Certainly, I have, Mr. Blunt. A council of regular physicians was called by my parents, when I was a child, to consider the nervousness exhibited by my three elder sisters and myself, and thus oöphorectomy was performed on all four of us, by that eminent surgeon, Prof. Cassius Fitz Greene Browne, A.M., M.D. My older sisters all died because they were not operated upon earlier in life. So the doctors said, and they all agreed that where parents neglect to have their girl babies oöphorectomised, it ought to be done by the city surgeon appointed for that purpose, to prevent the thousand and one diseases that assail girls when they grow up to womanhood as their Creator made them, and they farther say it should no more be neglected than vaccination, and certainly my own case proves the truth of their assertion." "I will thank you for my hat, Miss Doolittle. Good night." "Good night, Mr. Blunt."

—Experience, the greatest of all teachers, has demonstrated that, in a large number of cases, Cod Liver Oil is beneficial for a few weeks, that the patient improves upon it, gains flesh and strength, but, unfortunately, this improvement does not continue; right in the midst of flattering prospects the patient comes to a halt, ceases to gain weight, or otherwise improve. Physicians have experimented for years in their endeavor to overcome this objection; it has finally been accomplished by Drs. G. Overend Drewry and F. C. Bartlett of London, England, who, by means of pancreatine, have succeeded in perfectly digesting or hydrating the oil, thus giving to the profession cod liver oil in a perfectly assimilable form, overcoming the only objection to its continued use. This hydrated oil is christened HYDROLEINE, and after nearly five years of extended trial it has been extensively approved of.

—Dr. Eustace Smith of London, physician to the Children's Hospital, and author of "Wasting Diseases of Infants and Children," says: "Mellin's Food is by far the best of any with which I am acquainted. It seems to agree equally well with children whether they are healthy or diseased."

CANADA

MEDICAL & SURGICAL JOURNAL

JULY, 1885.

Original Communications.

CASE OF CÆSAREAN SECTION.

By JOHN L. BRAY, M.D., Chatham, Ont.

(Read before the meeting of the Ontario Medical Association, June 4th, 1885.)

On the 27th of February last I received a telephonic message from Dr. Abbott to go at once to Comber and bring obstetric case. On arrival at Stony Point, I found a man waiting to drive me to his house, about six miles south, where Drs. O'Keefe of Tilbury and Abbott of Comber were awaiting my arrival. The former had been called that morning at three o'clock to attend Mrs. G. in labor. She was about 27 years of age, 5 feet 6 inches high, well proportioned, and the mother of one child, 5 years of age. She had a tedious, but not serious, delivery of her first child, which terminated without artificial aid in about 24 hours. Some three years ago she was the victim of an accident which proved to be the cause of her present trouble. At that time a corn crib fell on her, fracturing the right ileum, and producing the deformity in the pelvis which eventually caused her death. There was nothing externally to show that any deformity existed, and it was only on attempting to apply the forceps that this was discovered.

As I said before, Dr. O'Keefe was summoned at 3 am., and found the os high and but slightly dilated. He waited some time, during which she was having strong labor pains, and the os becoming more dilated, with no advance of the head, he thought it best to apply the forceps. He attempted to do so,

but found it impossible, as the fœtal head was thrown forward over the pubic arch; and although he could apply one blade, it was impossible to introduce the other, as there seemed to be a wall of bone on the right side of the pelvis, forming, as it were, a shelf, upon which the fœtus rested. After several unsuccessful attempts he sent for Dr. Abbott, who also failed. They then sent for me, and when I arrived, about 3 p.m., I found the os dilated, the fœtal head very high, labor pains strong and continuous, and the patient cheerful. On attempting to introduce the forceps, I had no difficulty in getting the left blade into good position, but there my success ended, as the shelf or projection of the ilium on the right side was an effectual bar to the application of the right blade. I then tried this blade first, but found it would always fall back of the fœtal head towards the sacrum, and assume a position resting on the perineum. After a consultation with Drs. Abbott and O'Keefe, it was thought best to perforate, although I was afraid, from the nature of the deformity, that it would be useless, as, if we succeeded in bringing the head down, it would be impossible to extract the child's body. And my fears proved to be correct, for after perforating, which was performed with the utmost difficulty, owing to the non-fixture of the fœtal head, and it being so far forward and so high up, it was impossible to extract, as the bones of the head could not be crushed, for all our attempts to apply the craniotomy forceps or cephalotribe were unsuccessful, and although we nearly emptied the skull, still we could not introduce any of the above-named instruments to crush and extract. We succeeded in getting the blunt hook into the foramen magnum, and used all the force possible, but could not budge the head, so we had another consultation, which resulted in sending for Dr. G. W. Jenks of Detroit, who arrived about 9 p.m. the same day. He tried the forceps, cephalotribe, etc., as we had done, but with no better success, as he found it was impossible to apply more than one blade.

Now, what was to be done? After having exhausted every known means of delivery by the vagina (I might say that I had previously tried to pass my hand up and get the feet, with the

view of turning, but in this I also failed), and the patient being yet strong with forcible pains, we concluded the only thing remaining was abdominal section. And this we decided on. At about 2 a.m., or about 24 hours from the commencement of labor, the patient having been removed from the bed to a table and placed under chloroform by Dr. O'Keefe, Cæsarean section was begun by Dr. Jenks. Commencing about two inches above the umbilicus, he continued his incision a little to the left till below that point, when he kept down the mesian line to about three inches above the pubis, when it was found impossible to go any lower, as on cutting through the abdominal walls and peritoneum he came upon the bladder, which was full (notwithstanding a catheter had been previously introduced). The neck was tightly wedged between the uterus and bones of the pelvis, so that the catheter could not have entered the bladder. This was, of course, a serious drawback, as it was found impossible to push it down out of the way, consequently the uterus had to be opened very high near the fundus, and to make matters worse, on cutting through this organ, the placenta was severed, and you can imagine how appalling the hemorrhage became—in fact, we thought it would prove fatal—but Dr. Jenks quickly finished the incision and removed the fœtus and placenta in less time than it takes me to describe it. Of course the moment this was accomplished, owing to the strong uterine contractions, the hemorrhage ceased, but in removing the fœtus the uterus was torn near the neck, which gave us some trouble, owing to a good deal of blood oozing from this rent. One of the most troublesome things connected with the operation was the difficulty of keeping back the intestines, and when they did come out, to keep them warm. This we endeavored to do by means of napkins dipped in hot water applied to them. We tried to keep the room at a temperature of 80°F., but you can imagine how difficult that would be with the thermometer about zero, and with no assistants other than the medical gentleman named. The cut edges of the uterus were brought together, and two deep and four or five superficial sutures of carbolized silk were put in, which, when done, completely closed the opening. The

abdominal cavity was sponged out, and, singular to say, the sponges were hardly colored, so little blood found its way in owing to the pressure made on the abdominal walls by the assistants. The abdominal wound was then closed by means of two deep and ten superficial silk sutures, the deep ones, of course, embracing the peritoneum. By this time the patient had completely rallied, and had come from under the influence of the chloroform. She was removed to bed, and hot water bottles placed all around her. A quarter of a grain of morphia was injected into her arm with the hypodermic syringe, and she appeared very comfortable. The extremities and body soon got warm, and she fell into a nice sleep. The temperature was normal and the pulse 120 when we left.

I did not see her again, but Drs. O'Keefe and Abbott were in constant attendance, and from them I learned she progressed nicely (with the exception of occasional vomiting) till Monday morning about one o'clock, when she began to get very weak. In a short time she became comatose, and died about 6 a.m., just 48 hours after the operation. There was no post-mortem, so we could not tell exactly what caused death. It certainly was not shock. It was almost too soon for peritonitis. It might have been hemorrhage into the intestinal cavity, owing to the giving way of some of the sutures caused by the vomiting, or, what in my judgment is more likely, *exhaustion*, caused, in the first place, by long continued labor pains, and added to by the many and varied attempts at delivery by instruments through the vagina, which finally reached the climax when Cæsarean section was performed, and by loss of blood incident thereto.

I will conclude this imperfect report of a most interesting case by saying that, taking it all together, it was a remarkable one, as this is the first case that has ever come under my notice where a woman had borne a child naturally and then had to be delivered subsequently by Cæsarean section. And when you consider the many disadvantages we labored under—performing the operation in the country, at midnight, by the light of two small coal-oil lamps, with only the assistance of the medical men, and the thermometer at zero, the wonder is that we

succeeded so well. Had I the same case to attend again, I should never perform craniotomy, as I believe it takes away the only chance of the mother, and of necessity destroys the child, which, in this instance, might perhaps have been saved. I will say nothing in reference to the other operations which might have been made, or the different ways of performing this operation, leaving these points for you to discuss.

REPORT ON PHARMACOLOGY AND THERAPEUTICS.

By JAMES STEWART, M.D.,

Professor of Materia Medica and Therapeutics, McGill University; Physician to the Montreal Dispensary, and Director of the University Dispensary for Diseases of the Nervous System.

ANTIPYRETICS.

It is proposed in the following article to give an account of two drugs recently introduced into practice belonging to this class, and to point out in a general way their worth as compared with agents of the same class that are, and have been for some time, in more or less every-day use. As these two agents are purely antipyretics, and have no influence directly, as far as is known, over the duration of any of the pyrexial diseases, it will be appropriate to indicate what are the necessary qualities of a good antipyretic. First, a desirable antipyretic should be able to act with promptitude; second, it should be certain in its action; third, its effects should last several hours; fourth, the subsequent ascent of the temperature should take place gradually; fifth, it should be devoid of untoward effects, especially those of a dangerous nature.

After considering the actions of these agents, we will be able to see in how far they fall short of those qualities.

ANTIPYRIN.

This is an alkaloid, which, like kairin, is obtained synthetically from the chinoline series. It acts as pure antipyretic, reducing an elevated temperature from whatever cause produced.

Judging from the cases reported up to the present, it appears to have a more powerful influence on the pyrexia of typhoid and

tuberculosis than that of any other disease. Prof. Pribram of Prague reports nine cases of typhoid fever treated with it. In three of these cases, one of which was very severe, the disease ran a practically non-febrile course from the administration of a dose of antipyrin every time the temperature reached 100°F. In the first, which ran a course of 14 days, the above result was obtained by the administration of an ounce of the drug for the whole period. In the second, which lasted 24 days, 4 ozs. were administered ; while the third case, which had a duration of 13 days, only required a little more than half an ounce for the whole period to keep the temperature below 100°. In the remaining six cases, Prof. Pribram ordered only a sufficient quantity of the antipyrin to keep the temperature reduced to 100°, and this result was obtained by doses not exceeding 20 grains in the 24 hours. With the exception of one who died from double pneumonia, all the patients recovered.

The results of the antipyrin treatment of Prof. Pribram's cases may be thus summarized: By the use of large doses in three cases, the course was non-febrile ; the use of small doses in six cases prevented a rise above 100°.

Antipyrin is eliminated with the urine. This elimination commences about three hours after a single dose is given, and continues for a period of twelve hours. Its presence is detected in the urine by the chloride of iron, which, when added, changes the color of the urine to a brownish-red. The depth of the reaction with the iron test corresponds closely with the sinking of the temperature. The more influence exerted on the temperature, the more pronounced is the color on the addition of the test.

Demuth has recently reported a large number of febrile cases treated with antipyrin, including three cases of scarlet fever, four of diphtheritic angina, six of pulmonary tuberculosis, three of facial erysipelas, three of acute rheumatism, two of intermittent fever, one of typhoid, and four of pneumonia. To adults he administered half a drachm, repeated this in three hours, and then gave 15 grains every two or three hours until the wished-for reduction of temperature was brought about. In all, usually

not more than one and a half drachms was necessary, and the time occupied in attaining this was about twelve hours. The temperature fell promptly, often to the normal, and in a few of the cases to below the normal. Following the reduction of the temperature, there was a fall in the pulse-rate.

The antipyretic effects of the antipyrin was most constant in typhoid, next in the tuberculous cases. It was less marked in the diphtheritic cases, but in every case there was a distinct antifebrile action. Demuth did not have any untoward effects in his cases. In no case was there any cinchonism. The drug was taken readily, and did not cause any irritation of the stomach. Collapse symptoms were never present. In a few cases where the temperature was brought below the normal, the pulse was small, but it soon regained in power, even before the temperature had risen to the normal. In not one case could he observe that it had any directly favorable influence over the course of the disease for which it was given. As soon as its effects had passed off, the temperature regained its previous might. Its action did not usually last any longer than twelve hours.

Argutinski and others report various forms of rashes due to antipyrin. This observer has more than once noticed such from even as small a dose as seven grains.

Profuse sweating has been observed after the use of antipyrin, but this is of rare occurrence compared with the frequency with which it attends the use of salicylic acid, kairin, hydrochinon, &c.

Pavay, after a considerable trial of antipyrin, comes to the following conclusions:—

1. Antipyrin always reduces a high temperature in doses of from 2.0 to 4.0 (℥ss to ℥i), the minimum depression amounting to 2.5°F., the greatest to 7.2°F.

2. The reduction of the temperature sets in from one to two hours after the dose is given, and continues from 12 to 16 hours.

3. It does not exercise any marked influence on the pulse or respirations. The tension in the arterial system being increased after the fall of the temperature.

4. Sweating is generally observed, but never to such a degree as is observed when salicylic acid is given in antipyretic doses.

5. Nausea, vomiting, pain in the stomach, vertigo and noises in the ears only very seldom observed. Collapse never.

6. It possesses marked advantages over resorcin, hydrochinon and kairin, on account of its freedom from dangerous effects.

7. It acts with great certainty as an antipyretic in pulmonary tuberculosis, pneumonia and typhoid fever.

8. In acute rheumatism, it has an influence on the fever; none on the pain.

9. When injected under the skin or into the rectum, its antipyretic action is just as marked and as certain as when taken internally.

10. Its easy solubility and pleasant taste makes it a desirable antipyretic for children.

11. Its action does not diminish, even when given for a lengthened period.

12. It should be given with caution when there is cardiac weakness.

13. In pulmonary tuberculosis, it acts quicker and more certain than any other antipyretic. This is its great advantage.

THALLIN.

Thallin is also a synthetic alkaloid obtained from the chinoline series. It forms salts, the lactates, sulphates and the hydrochlorates, especially, being adopted on account of their stability and easy solubility for internal administration.

Jaksch, first assistant in Nothnagel's klinik, reports 86 cases of different febrile disorders treated by these different thallin salts. The majority were cases of typhoid, acute rheumatism, erysipelas, puerperal sepsis, pneumonia and tuberculosis. In all the antipyretic action was marked, especially in the tuberculous cases. The temperature minimum occurred usually from two to four hours after the administration of the salt, while the duration of the fall was not longer than five hours. The ascent was generally attended with a rigor. In no case was any direct influence over the course of the disease evident.

Mingazzini has found no difference in the action of the sulphate and lactate of thallin. Either salt, in doses of 0.12 (2 grains),

reduces the temperature about 1°F., the duration of the fall varying from four to six hours. After doses of .25 (about 4 grains), there is a fall of 2½°F. Doses of .50 (8 grains) reduces the temperature quicker and lower than when the same quantity is given in two divided doses at intervals of three hours.

Thallin can be administered hypodermically without causing either abscesses or subcutaneous infiltrations. The fall of temperature, when given this way, is not only quicker, but greater. During the fall of the temperature, sweating, which is often profuse, is generally present.

Mingazzini did not observe vomiting, cyanosis, or symptoms of collapse in any of his cases, profuse sweating and rigors being the only unpleasant untoward effects observable. The more marked and durable the antipyretic effect, the more severe and prolonged were the rigors. In a few cases the rigors lasted two hours. Another undesirable effect that this observer noticed was that the temperature very frequently attained a higher level after the elimination of the drug than it previously had.

Thallin is eliminated with the urine, which it colors dark green. On the addition of chloride of iron, the color changes to a red.

ANTIPYRIN AND THALLIN COMPARED.

First, with respect to the certainty of action.—Both agents have a very certain action, for, when given in appropriate doses in cases attended with considerable pyrexia, they reduce the fever. They both act more powerfully as antipyretics in the pyrexia of pulmonary tuberculosis and typhoid fever than that of any other disease. When antipyrin is administered, the temperature commences to fall in from one to two hours after, and continues falling for a period of from four to six hours, when the maximum fall is reached. Thallin is somewhat longer in causing a fall of temperature, taking usually three hours before any marked effects are noticeable ; but once the effects are manifest, the maximum depression is quickly reached, usually within two hours after.

As regards the duration of the antipyretic effects, the fall in the cases of antipyrin lasts usually twelve and even sometimes sixteen hours, but with thallin seldom longer than six hours.

The subsequent ascent after antipyrin is somewhat slower than it is with thallin.

With respect to untoward effects, neither agent can be said to be perfectly free from them, but they are less marked after antipyrin than after thallin. Both cause more or less sweating, but with neither is this a contra-indication of any moment. Rigors frequently attend the subsequent ascent of the temperature after thallin, while they are extremely seldom seen after antipyrin. Both cause exanthems, which quickly disappear after the effects pass off.

In estimating the positive qualities of an antipyretic agent for evil, by far the most important point to take into consideration is the influence that it exercises on the heart. An antipyretic which has a cardiac depressant action is a two edged tool. This is the reason that kairin has been practically discarded from practice. In full antipyretic doses it is apt to cause symptoms of collapse. It is the possession of these qualities that makes large doses (20 grains and upwards) of quinine such a dangerous remedy. Salicylic acid is not free from this action either. With regard to antipyrin, no indisputable case has been brought forward where any symptoms of collapse have been apparently directly due to it. As much, however, cannot be said of thallin.

From the knowledge we at present possess of these agents, we may conclude that they are equally effective, but that antipyrin is the safest. Whether it is absolutely safe when given in proper doses remains to be seen.

THE ANTIPYRETIC ACTION OF ANTIPYRIN, QUININE AND THE SALICYLATES COMPARED.

There can be no question whatever about the far greater efficiency of antipyrin. Its action is certain. The antipyretic action of quinine and the salicylates, on the other hand, is far from being so, if we exclude the action of the former in malarial fever and of the latter in acute rheumatism. He who relies on the anti-febrile properties of either of these drugs in pulmonary tuberculosis or typhoid fever will meet with frequent and great

disappointments. Further, they both constantly give rise, in full antipyretic doses, to the unpleasant group of symptoms known as "cinchonism," and not uncommonly we find their cardiac depressant action present in a greater or less degree.

There has been a good deal of speculation over the supposed mode of action of antipyrin and thallin in reducing temperature. It is highly probable that both of these agents have a direct action in lessening the production of heat. The reduction they effect is certainly not wholly due to a vaso-motor paresis, for the fall generally commences before the patient begins to sweat, and it is as pronounced in those cases unattended with sweating as in those which are. Further, they effect reduction of the temperature when agaracin (a powerful anhidrotic) is simultaneously administered with them. Whether they have a direct anti-parasitical action or not has not been shown or rendered even probable. Neither, as yet, have been shown to have any power directly of influencing the duration of any of the febrile diseases.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL.

UNDER THE CARE OF DR. RODDICK.

Case of Cancer of Right Kidney—Secondary Affection of the Liver—Autopsy.

E. C., æt. 17, unmarried, was admitted 25th November, 1884, suffering from weakness and enlargement of the abdomen. Has always enjoyed good health up to four years ago, since which time she has been troubled more or less continuously with pain in the right side, under the lower ribs. About thirteen months ago first noticed a lump in the abdomen to the right of the umbilicus. Says it appeared to her flat and about the size of a small saucer. It was tender on pressure. Previous to this she could go about, driving and walking a great deal: since then, however, has been obliged to remain quiet, as movement always aggravated the pain, and at times caused nausea and vomiting. Four months ago was seized with sudden and severe pain in the same

locality, with vomiting, which kept her in bed for three or four weeks. Her general health has perceptibly failed for the past four years, being weak and anæmic. During a year or more, appetite has been lost, emaciation very marked, and anæmia decided. For the past three months has been confined to bed almost constantly. Bowels have been generally quite constipated. Tympanites has, at times, been troublesome. Menses have ceased for four months. Urine has been voided naturally, and she has noticed nothing unusual in its appearance.

Patient looks very pale and thin, with a waxy, transparent skin and blue veins. Examination of the abdomen shows a rounded tumor projecting from the surface a little to the right of and below the umbilicus. It feels about the size of two fists, and is distinctly fluctuating. It is quite continuous above with what feels as the firm edge of an enlarged liver, extending obliquely across the abdomen to the left hypochondrium. The hepatic region is prominent, as are also the epigastric and left hypochondriac, the whole feeling solid and resisting. The area of dulness is very extensive—on the right side, from the 4th rib to the crest of the ilium; on the left, from the same level above to the edge of the costal cartilages. Heart and lungs found normal.

A few days after admission, a very small quantity of clear blood was noticed in the urine, with a corresponding trace of albumen. This was present for three or four days, when it disappeared. After this, no abnormality was observed in the urine.

On 2nd December, the fluctuating tumor was aspirated with a large needle, and about 8 ozs. of fluid removed. This had the appearance of broken-down blood, and was of a chocolate color. The operation was followed by some relief to the symptoms for a short time.

The patient, however, soon again began to suffer much abdominal pain as before, necessitating the free use of morphia hypodermically. The mass evidently increased in size, extending beyond the dimensions above given. She fell into a condition of extreme marasmus, with great prostration, and died exhausted March 4th, 1885.

The autopsy showed that the original growth was a softened sarcoma of the right kidney, the organ weighing about two pounds, made up of sarcomatous growth containing several chambers, which held a grumous fluid similar to that removed. The liver was enormously enlarged, and studded with soft secondary growths of various sizes.

Reviews and Notices of Books.

On some Common Injuries to Limbs, their treatment and after-treatment, including Bone-setting.—By EDWARD COTTERELL, M.R.C.S., Eng., and L.R.C.P., Lond. London: H. K. Lewis.

This small book describes those affections of the extremities following injuries which have been often so successfully treated by bone-setters. Mr. Cotterell thinks that if surgeons paid more attention to the after-treatment of joint injuries the occupation of the bone-setter would be gone and the public much benefited thereby. Dr. Wharton Hood, many years ago, drew attention to the subject, and showed that the cases successfully treated by the bonesetter were those in which, after an injury, adhesions formed external to the joint. These adhesions are broken down by the rapid manipulations of the bonesetter, and the patient gets well as if by a miracle. In stiff joints following injuries, it is now the common practice (thanks to Dr. Hood) to place the patient under ether and forcibly break down the adhesions; the result of this treatment is quite as successful as that of any bonesetter, though not surrounded with as much mystery. Dr. Cotterell also fully describes the treatment of the various fractures—lawn tennis arm, rider's sprain, lawn tennis leg, sprained knee and ankle, &c. In sprained ankle, he immediately straps the foot and leg, and allows the patient to walk about; and in Potts' fracture, he advocates the immediate application of plaster-of-paris. The book is well worthy of careful perusal, and the reader will get many tips in the treatment of those rather obscure affections following injuries which are passed over with but a word or two in the ordinary text-books. The work is nicely

got up in large type, and is written very tersely and concisely, which is a recommendation in these days of tiresome prolixity of book-makers.

Clinical Lectures—

On Scrofulous Neck.—By T. Clifford Allbutt, M.A., M.D., Cantab, F.R.S., F.R.C.P. And

On the Surgery of Scrofulous Glands.—By T. Pridgin Teale, M.A., M.B., Oxon, F.R.C.S.

These two lectures draw attention to a subject which is of as much interest to the surgeon as the physician. Scrofulous neck is an affection which every practitioner of medicine sees and would be glad to know how to treat, now that the "royal touch" and priestly conjurations have, owing to the faithlessness of the present generation, ceased to be of any avail. Dr. Allbutt describes in a clear and entertaining manner the rise and progress of scrofulous glands. He strongly advocates the early extirpation of every caseous gland, and hopes, "if such a practice becomes universal, scrofulous necks and all the hectic, asthenia, emaciation and phthisical risks which belong to it, will become matters of history."

Mr. Teale tells us how to extirpate glands, and shows how successful their removal is and what a beneficial influence the operation has on the health of the patient. He strongly advocates the scraping out of glands which have broken down and are discharging, and which cannot be dissected out. The question of the removal of glands which have not suppurated or become caseous he considers to be yet an open one.

Diagnosis and Surgical Treatment of Abdominal Tumors.—By Sir Spencer Wells, Bart. London: J. & A. Churchill.

This is a cheap edition, printed in double columns, of Sir Spencer Wells' well known work. The subject matter is somewhat condensed, and much new material added. It is got up in the style of Sir Henry Thompson's cheap edition of his work on the bladder. The book is published at three shillings and

sixpence, a price which brings it within the reach of all. Little need be said in praise of the work of a surgeon whose reputation is world-wide. It is a most valuable book, and the record of the author's own work, which in great part forms the history of ovariotomy. The chapter on the rise and progress of this operation is most interesting and instructive. Included in the work is a short account of the operative treatment of various kinds of abdominal tumors other than uterine and ovarian, such as splenic, renal, hepatic, &c. One thing strikes a reader acquainted with the literature of abdominal surgery, and it is this : that the name of Mr. Lawson Tait is not mentioned even in connection with oöphorectomy and cholycystectomy. It seems to us that a book on abdominal surgery which takes no notice of the very valuable and original work of Mr. Tait is incomplete, and we wonder greatly that a man of Sir Spencer Wells' reputation and standing should be weak enough to allow private feelings to have such influence with him, when writing for the general profession, as to make him ignore the work of a colleague and fellow-searcher after truth.

We advise all those who perform, or even contemplate performing, operations on the abdomen, to carefully peruse this book. Its handy and cheap form will now doubtless give it a popularity it never had before.

The regimen to be adopted in cases of Gout.— By Dr. Wilhelm Ebstein, Professor of Clinical Medicine in Göttingen. Translated by John Scott, M.A., M.B., Honorary Physician, Manchester Southern Hospital for Diseases of Women and Children. London : J. & A. Churchill.

This little treatise first discusses in a brief manner the pathogenesis of gout as bearing upon the question of diet and mode of life ; then sketches an outline of the regimen which, the author thinks, is most to be relied upon. Amongst other special forms of treatment, the German fruit-cures are alluded to. "Such fruits," it is said, "as cherries and strawberries, which contain an organic acid, can be taken with good results, and are less injurious to digestion than the alkaline carbonates." "When

the cure is confined exclusively to the use of fruits, as, for example, in the grape-cure, we must be very cautious. Dyspeptic troubles are easily induced by such means, and the mischief thus wrought counterbalances any good that may be derived from the fruit." The writer has made enquiries extensively amongst the physicians treating workmen in the lead-mines of the mountains, and the result has been to throw considerable doubt upon the existence of a causative relationship between chronic lead-poisoning with gout and contracted kidneys. The dietary, clothing, exercise, climate, &c., are all considered in the light of their bearing upon the disease.

Lectures on Diseases of the Nervous System, especially in Women.—By S. Weir Mitchell, M.D., Member of the National Academy of Sciences, Physician to the Orthopœdic Hospital and Infirmary for Diseases of the Nervous System. Second edition, revised and enlarged; with five plates. Philadelphia: Lea Brothers & Co.

The impetus given by Dr. Mitchell to the study of certain special and intractable forms of nervous disorder is everywhere recognized, and he has many followers in his successful methods of treatment. His lectures, which are admirably written, are full of interest and instruction, eminently practical, and contain a large number of illustrative cases. The present edition, besides a certain number of alterations in some of the early lectures, has been increased by the addition of lectures upon the difficulties of diagnosis in hysterical diseases of joints, on the relations of hysteria to organic disease of the spine, and on hysterical disorders of the rectum.

On Bedside Urine-testing: A clinical guide to the observation of urine in the course of work.—By Geo. Oliver, M.D., Lond., M.R.C.P.L. Third edition. London: H. K. Lewis.

This is a very handy little volume, very carefully prepared, and containing excellent practical directions as to the readiest methods of making clinical examination of the urine for all im-

portant substances. Several of the procedures differ from those commonly adopted. For instance, for taking specific gravities, instead of the urinometer the author prefers a glass bead accurately representing 1008. By means of this and a graduated tube, accurate estimates of the specific weight can be made of even very small specimens of urine. For albumen, Dr. Oliver strongly recommends the test-papers of potassio-mercuric-iodide and of potassium ferrocyanide as being most convenient, most delicate, and open to fewer objections than any others. We can highly recommend this manual to the attention of all careful practitioners and clinical students, who will find therein many suggestions and aids in their prosecution of this important part of medical work.

The Physician Himself and what he should add to to his scientific acquirements in order to secure success.—By D. W CATHELL, M.D., late Professor of Pathology in the College of Physicians and Surgeons of Baltimore. Fourth edition. Baltimore: Cushings & Bailey.

We have already taken occasion to introduce this work to the favorable notice of our brethren, and gladly notice the appearance of the new edition. The present is said to be enlarged by the addition of nearly three hundred new suggestions. We make no doubt that it will meet with a constant demand, as every old physician and recent graduate will want to see what this observant writer and canny counsellor has to say.

A Treatise on Practical Chemistry and Qualitative Inorganic Analysis, adapted for use in the laboratories of colleges and schools.—By F. CLOWES, D.Sc., Lond., Fellow of the Chemical Societies of London and Berlin, Professor of Chemistry at the University College, Nottingham. With illustrations. From the fourth English edition. Philadelphia: Lea Brothers & Co.

We have here a complete guide and text-book for the student through his course of practical chemistry. It covers the whole ground thoroughly, and gives innumerable hints and explanations

to make the work more easy and intelligible. It is divided into seven sections. In the first, some simple directions are given for preparing for use the apparatus which it will be necessary to employ. In the second, the preparation of certain gases is described, and experiments illustrative of their properties are detailed. The third section prepares the worker for chemical analysis by a description of the most important methods and processes employed in qualitative analysis. The reactions which are employed as tests and methods of separation are contained in the fourth section. The fifth is occupied with the detection of the constituents of simple salts; the sixth, with the analysis of any liquid or solid inorganic substance. The seventh consists of information concerning the fitting and furnishing of the chemical laboratory.

Teachers and students of chemistry cannot do better than make a constant companion of this useful text-book.

A Treatise on the Science and Practice of Midwifery.—By W. S. PLAYFAIR, M.D., F.R.C.P. Fourth American from the fifth English edition. With notes and additions by ROBERT P. HARRIS, M.D. Philadelphia: Lea Brothers & Co.

The first edition of Dr. Playfair's work appeared in England in 1876, and now we have a fifth English and a fourth American edition. After these facts little need be said of its popularity and adaptation to the needs of students and practitioners of midwifery. It has been well said that the necessities in the writing of books are mainly two—those of the reader and those of the writer. Whatever may have been the necessity of the writer of the work in question, Dr. Playfair, by his work, met a much felt want of the profession. While the author does not claim many changes in this edition, following as it does so closely on the previous one, the whole has been carefully revised, and the chapter on "Conception and Generation has been in great part rewritten and made to incorporate the most recent advances in embryology."

One or two points only can be noted in the space at our dis-

posal. The author, in speaking of the treatment of the umbilical cord, alludes to the treatment by laceration, and states that he has used it in many cases, but prefers the ligature. His friend Dr. Stephen has used it in several hundred cases. In discussing transfusion, Schäfer's method of immediate transfusion is described and endorsed. Dr. Playfair still adheres to the theory that in some cases of puerperal septicæmia the disease is autogenetic. This theory, we believe, will be rejected with advancing knowledge of the subject. It is not sound logic to assert that because we cannot see a source of infection from outside it must therefore be generated within the body of the puerpera. A little reflection will suggest enough possible avenues for the entrance and development of germs, without resorting to the autogenetic theory.

This work remains one of the very best text-books on Obstetrics in our language. That able obstetrical statistician has done his editorial work most satisfactorily. This edition is dedicated to Dr. Emmet.

Books and Pamphlets Received.

A Text-Book of Medical Physics, for the use of Students and Practitioners of Medicine. By John C. Draper, M.D., LL.D. Philadelphia: Lea Brothers & Co.

The Climate of Canada and its Relations to Life and Health. By W. H. Hingston, M.D., D.C.L. Montreal: Dawson Brothers.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, April 17th, 1885.

E. H. Trenholme, M.D., 2nd Vice-President, in the Chair.

Tubercular Lung with Pleura from a case of Hydropneumothorax.—Rr. R. J. B. Howard exhibited the specimen, and said that on opening the thorax the right lung was emphysematous and contained many grey granulations about the anterior part of middle lobe. Left pleural cavity contained a blood-clot measuring 17 oz.; on removing this, the pleural sac was everywhere lined by firm buff-colored membrane nearly a ¼-inch thick. The pulmonary portion was equally thick, and bound the lung

firmly down to the vertebral column. A small opening communicated with a cavity in the lung, this opening being situated high up behind. So firmly attached was the lung that it had to be cut out; in doing this the cavity was opened. It occupied the whole upper lobe, and would have held a hen's egg. Its walls were lined in the upper part by a smooth, grey membrane, but the larger part of the walls were ragged and crossed in all directions by strands of tissue, in many cases consisting only of one or two vessels of considerable size. The cavity contained a good-sized clot. No open vessel was found. The lower lobe contained many caseous nodules. Evidently the cause of death was hemorrhage from the pulmonary cavity into the pleural space—in fact, internal hemorrhage, a very unusual termination. The patient had had pneumothorax for months, and his chest was opened and drained about two weeks before. There was more fear that the operation might have caused, or at least accelerated death, but he could find nothing to lend color to this view—in fact, the obliteration of the pleural cavity from the bottom was commencing.

Dr. Geo. Ross said he had first seen this patient about 18 months ago, but that he had been in the hospital previously for months with phthisis and softening of the left apex. The day before seeing him he had been seized with severe pain in the left side, accompanied with shortness of breath and distress. This continued for 24 hours. On examining, pneumothorax was found, but there was no fluid. The left chest was distended with air, the heart pushed over, pulse rapid, and he was cyanotic. After a time fluid gradually replaced the air till the left side was full. Was then tapped and serous fluid removed, giving great relief and feeling much better. Went home, where he improved and gained weight. He came to the hospital once a month to be examined. After some months the chest again refilled and he became feverish. He was again tapped, a sero-purulent fluid coming away. The fluid rapidly re-collected, accompanied with fever and emaciation. An incision between the ribs was made by Dr. Shepherd and a drainage tube put in. The fever lessened, though some remained. The pulse was still rapid. He was improving, till

one day he suddenly became pale and exhausted, and blood leaked out by the tube. But for this accidental ulceration of the vessel in the lung he thought this patient might have recovered. A similar case had been treated by Dr. Wilkins and himself ten years ago, who recovered, and is now alive.

Dr. Kennedy said that this case recalled one he had seen years ago, that of a man who died from fracture of the skull. At the post-mortem the right lung was found collapsed and in a fibroid condition, the side of chest sunken in, and the viscera had adapted themselves to the altered shape of the chest. The organs appeared healthy, and the man would have lived years but for this accident. He had been operated on for pyothorax two years previously.

Dr. Godfrey said he had seen a similar case where a woman died seven years after from tuberculosis of the opposite lung.

Pieces of Necrosed Bone from an Abscess at site of Potts' Curvature.—Dr. Shepherd exhibited eight small bits of bone removed by him from an abscess at the side of the spine. A second abscess was on the side—both following inflammation produced by a kick over the part.

Antiseptic Midwifery.—Dr. Armstrong read the following paper on this subject:

That Sir Joseph Lister has done a great deal for surgery—by enlarging the field of justifiable operations and by rendering the results of all operations more satisfactory—none will deny. But to what extent the details of his method of operating are essential there is still a wide difference of opinion; and even the soundness of the theory upon which his practice is based may be safely questioned. Indeed there is a suspicion among not a few that, after all, we may find in the future the lesson to be learned from the practice of Lister is that absolute cleanliness of the part operated, upon the part of the operator, and of instruments used in the operation, *is the great essential of success*, and the thanks of the profession to Joseph Lister should be none the less profound, because his labors have been none the less effective if the suspicion should prove to be correct. The germ theory is the fashionable way of accounting for many of the acci-

dents of surgery, as well as for the presence among us of many diseases. Lest we again lay ourselves open to the charge, sometimes laid against us by the lay press, of allowing ourselves to be led to one extreme by some prominent professor with an unpronouncable name, and then in a short time following some other leader as blindly to the other extreme, let us pause and examine some of the facts of familiar occurrence in every-day life, and ascertain whether or not they are in harmony with the theory advanced.

Antiseptic surgery is based on the theory that the atmosphere which we breathe and by which we are surrounded contains germs which, when allowed to come in contact with wounds, are capable of lighting up unhealthy action in them ; and this theory has been more and more widely applied, until now, by some, it is taught that the physiological action of child-birth should always be conducted on what are known as strictly antiseptic principles, and it is this somewhat new application of the germ theory that I purpose briefly to discuss this evening.

Do our parturient patients whom we attend in confinement in the ordinary way, without the use of any antiseptic dressings or douches, and without any special previous cleansing or disinfection of their apartments, present, as a rule, symptoms of septic inoculation ? So far as my experience goes, the answer is decidedly in the negative. If I am not much mistaken, it is the exception for men who do a large midwifery practice among the middle and lower classes to have cases of septic poisoning occurring among their parturient women. We younger men are often called to attend women in their confinement whom we see for the first time when they are in labor,—women who live in unhealthy, low, badly-drained localities, and in houses not overclean and ill-ventilated—women whose surroundings are eminently adapted to favor the growth and spread of atmospheric germs, and yet even among these I believe it is comparatively rare to have trouble of a septic character. Now if a man confines 100 women, and 98 of them make perfect recoveries and two of them present symptoms of septic poisoning, should he blame any one of the many surroundings common to them all

as air, or should he look for some extraordinary agent to account for the evil. The experiences of ages and all medical literature teaches the latter. We constantly hear and read of septic cases due to a portion of decomposing placenta or membrane or blood-clot remaining in the uterus or vagina, or cases that can easily be traced to contagion carried by the accoucheur. Now, is it possible for the strictest antiseptic precautions to prevent the occurrence of septic infection of women during and after their confinement? Let us suppose, for instance, that we have had apartments to be occupied by our patient newly whitewashed and papered and disinfected, and the bed, bedding and napkins and all the clothes to be used by the patient thoroughly carbolized or sublimated, is our patient then safe? I fear not, unless the accoucheur and nurse themselves see to it that they neither touch nor enter the presence of any unclean thing. If the doctor comes from examining a child with diphtheria, or a patient with erysipelas, and enters that chamber and touches the patient or the napkins, he unavoidably communicates the poisons to the patient or to the napkins and the napkins to the patient. I think I cannot better illustrate not only the *possibility*, but the *probability* of such a sequence of events than by quoting an account of similar occurrences from the latest edition of Emmet's "Principles and Practice of Gynæcology." On pages 717 and 718 of this work Emmet relates the two following cases. In the first one Dr. Emmet was about to remove a small ovarian cyst from a young girl in apparently perfect health. Dr. Emmet says: "The sponges, instruments and ligatures had been prepared with unusual care, and I never performed an operation where there seemed so little liability for any complication to occur." Just before the operation several physicians from the Polyclinic or Post-Graduate Medical School sent in cards of introduction from some of the staff, requesting that they might witness the operation, and they were admitted. Just as the doctor was commencing the operation one of these gentlemen picked up a pair of forceps or scissors from the tray to show a friend alongside. Emmet caught his hand, requested that he would not touch the instruments, and then went on with the operation,

neglecting to disinfect the hand that had touched the gentleman's coat. In less than twenty-four hours, the report says, the girl was doomed, and died on the sixth or seventh day. It was found at the autopsy that an abscess had formed, extending from the wound and around the pedicle, and that the girl died of septic peritonitis. Emmet adds that the man who picked up the instrument was responsible for the girl's death.

The other case is that of a woman suffering from procidentia, sent to Dr. Emmet for treatment by Dr. A. Jacobs. At the operation, after Dr. Emmet had denuded a large surface, Dr. Jacobs, who was present, placed his finger upon the prolapsed surface to satisfy himself that it was unusually hard. Two days after the operation, the patient's temperature was found to be 105°. Upon removal of the sutures, the whole surface which had been freshened was found covered with a diphtheritic deposit as thick as a piece of chamois leather. It was ascertained that Dr. Jacobs had examined the throat of a child suffering from diphtheria early that morning. The operator had not seen a case for years; Dr. Bache Emmet, the assistant, had not in six months. The nurses were out of the way of meeting the disease, and the patient had not been out of the house for several weeks.

Now the two points I would make here are:

1st, How remarkably easily septic matter is conveyed. From what we know of the properties of septic matter, it does seem that, if the air is full of them, all wounds exposed to the atmosphere pressing these germs against exposed surfaces with a pressure of 15 lbs. to the square inch should become infected; yet we know from experience that this is not the case, and the fact that this is not the case is good evidence that the atmosphere ordinarily does not contain them. That wounds heal kindly and by first intention, and that women are confined every day without any septic trouble supervening, and without the so-called antiseptic precautions being taken, certainly proves this much, that the so-called antiseptic precautions are not essential to perfect healing of the parts after an operation or to perfect recoveries after confinement.

2nd, That, in spite of all possible antiseptic precautions, one

touch from a known and well-defined source of contagion renders all our antiseptic preparations useless.

May not the question be fairly asked: If all the known and well-defined sources of contagion are strictly guarded against would we need all this paraphernalia to protect our patients against an imaginary foe? When going through a hospital and seeing wounds filled with pus that have been made under the spray and dressed according to Lister's method, it is really amusing to listen to the many explanations given to account for the presence of the pus and the unhealthy action. Some little detail, we are gravely told, was accidentally omitted, and this is the result. Explanations which can only be compared to the reasons given by those estimable people possessed of more goodness of heart than of wisdom when trying to account for the non-restoration to health of some one who had something the matter with him, and had been prayed over by the brethren possibly for months together. Herbert Spencer, in his essay on the coming slavery, says that when railways were first opened in Spain peasants standing on the track were not unfrequently run over, and that the blame fell on the engine-drivers for not stopping, rural experiences having yielded no conception of the momentum of a large mass moving at a high velocity; and he goes on to speak of a political momentum which, instead of diminishing or remaining constant, increases. I think we might recognize a momentum in antiseptic theories—a momentum that seems to be carrying us into irrational and absurd practices, that after a time we shall be compelled to give up, but not without the loss of prestige and influence with the public. According to the present rate of progression we shall soon, when called upon to attend a case of midwifery, be compelled to retire to our bath-rooms, wash and scrub in disinfectant solutions, don a fresh suit of disinfected clothes, and, like the Romish priests, when called to administer the communion at a person's residence, we shall go forth, preceded by couriers to clear the way and open doors, etc., not daring to touch a door-bell knob, lest, possibly, an unclean mendicant has first handled and defiled it.

Would it not be better if our line of action were directed

against more tangible sources of septic poison than the atmosphere we breathe. Instead of becoming machines, let us more carefully and intelligently avoid known sources of danger. We, as general physicians, must attend diphtheria, scarlatina, peritonitis, etc., but if we do, before going from these cases to attend confinements, let us take those measures to ensure against conveying them to our patients which every-day experience proves to be sufficient, rather than inflict upon our patients a long detail of preventive treatment, which is repugnant, troublesome and costly, both as to time and money. More than this, these very precautions which some would induce us to take to insure the safety of our patients may be made indirectly to increase this danger by rendering us less careful in avoiding known sources of contagion. When in Philadelphia a year ago, in conversation with Prof. Levis, he expressed himself as a thorough believer in Listerism. He told me that when going through Sir Joseph Lister's wards Lister remarked to him that his wards were æsthetically dirty but surgically clean. That simply proved that it was possible by great care and by the use of every precaution to keep a surgical wound clean in an æsthetically dirty ward; but it shows the tendency to trust to these more showy and formal means of prevention, and to neglect the ordinary rules of cleanliness, which have been rightly said to rank next to godliness. Let us first pluck the beam from under our finger nails, and then, perhaps, we shall see more clearly to pluck out the mote from the atmosphere.

Dr. Kennedy said he did not believe in treating a natural process as if it were pathological. He spoke against the use of the spray, etc., in labor, and thought that antiseptic injections were very seldom needed. The giving of these injections by the physician was lowering him to the position of nurse. He had read of poisoning following the use of injections of solution of bichloride of mercury.

Dr. Campbell endorsed Dr. Kennedy's views. During his 23 years of practice he had attended 1,700 cases of midwifery, and only had six cases of septic trouble, using only ordinary precautions. Most of the cases of septic poisoning were among the better classes.

Dr. A. A. Browne said he had never seen antiseptic midwifery carried out. He thought the main things to attend to were cleanliness and having fresh air. In the Vienna hospitals the fresh air was heated before going through the wards.

Dr. Shepherd said that of late years the term antiseptic treatment had a wider meaning than Listerism. Lister himself says that the spray is the smallest part of the treatment. Fifty per cent. of deaths used to follow amputation of the leg; now the death rate is five or six per cent. The case is not, Did a number do well *without* antiseptics? but, Do all? He has notes of 20 major operations dressed antiseptically without a death, and all but one healed by first intention.

Dr. Trenholme, in over a thousand cases of midwifery he attended, never had a case of septic poisoning, and only had two deaths—one from shock after delivery by forceps in a woman with a deformed pelvis; the second, a woman who got up and walked in the snow a few hours after delivery. He attributed his success to following, as far as he could, Dr. Goodell's teaching, which was to have his patients walk from the room they are confined in into the room they intend remaining in during convalescence; also, getting the woman to sit up every day for a few minutes. This was done to favor expulsion of clots, etc. He was also very particular to see that the uterus, after delivery, was completely emptied of all membranes.

Dr. Campbell said he always orders his patients to use an ordinary chamber instead of the bed-pan, thereby necessitating her sitting up.

Cases in Practice.—Dr. Campbell related a case of a gentleman who had gonorrhœa over two years ago, and who, about a week after marrying a perfectly healthy lady, had a recurrence of a discharge similar to his old gonorrhœa. Dr. Campbell asked, Would this be called a gonorrhœal discharge and be infective?

Several gave it as their opinion that it was a case of non-specific urethritis, such cases not being rare in newly-married men.

A child without nipples.—Dr. Kennedy described this condition lately seen by him in a boy; no rudimentary glands could be made out.

Dr. Shepherd said that more of such cases were recorded where deficiency was only on one side.

Stated Meeting, May 1st, 1885.

T. J. Alloway, M.D., 1st Vice-President, in the Chair.

Case of Suppurative Tubercular Peritonitis simulating Ovarian Tumor.—Dr. Gardner read a paper on this case, which appeared in the June number of this Journal.

Case of Partial Epilepsy.—Dr. Mignault read the following paper :

The occurrence of cases of transient or partial epilepsy are by no means rare, and, though less striking and, so to speak, impressive than the convulsive forms, are still worthy of study, and from the mildness of the morbid process seems much easier to arrest, and perhaps cure, than the former variety. The multiplicity of manifestations of this disease may often mask its presence, and, as in the case here cited, may almost be overlooked by the patient himself.

On the 12th of last February I was summoned to see M. H., aged 40. He occupied a private ward in the Hotel Dieu, and came to be treated for what is called biliousness. I gave him the usual treatment, a purge, and subsequent doses of nitro-muriatic acid, and the patient left the hospital, apparently feeling much relieved, and returned to his home in Boston.

About the 25th of the same month patient returned, and complained of renewed attacks of biliousness. The patient, a few days afterwards, mentioned incidentally that he suffered from occasional attacks of vertigo and fatigue. It was only some days later that he described, after several questions, the nature of these vertiginous attacks. The seizures occurred as follows :— On a sudden, without preliminary warning, he would lose consciousness, and, being possessed of a fixed idea, would set to work to execute it mechanically. He generally fancied that it was necessary for him to go to bed ; accordingly he would seek some room where he knew a bed was situated, and would undress and get into it. As often happened, being a teacher in an orphan

asylum, he would manage to crowd himself into a child's cot, and would, to his intense disgust, suddenly resume consciousness and find himself cramped and stiff from the exertion. On another occasion, while waiting for a train at a railway station, he started off to walk along the track. As he crossed a bridge, stepping from sleeper to sleeper, he was loudly shouted at by several persons, but he was still unconscious, and pursued his way for about four miles, when he was both astonished and amazed to find that he had wandered so far away from his destination. This feat was all the more remarkable from the fact that my patient was very lame from hip disease in childhood, and wore a boot with a cork sole which replaced the shortening of the diseased leg. He states that the duration of these fits is from a few minutes to an hour, and that they generally occur in the daytime and very irregularly. He only has had them since the last two years, and they occur simultaneously with disordered digestion and torpid liver. No premonitory symptoms ever occurred. From the statements of eye-witnesses, the patient at these times becomes very pale, the eyes are wide open and have a fixed expression. He answers quietly and reasonably any question which may be addressed to him, and will often even apologize for the trouble he is giving. The patient, who is an intelligent and serious man, avers that he has not the slightest consciousness of what occurs.

Upon questioning patient as to his history, he states that at 18, while a student at college, he suffered from epileptic seizures of the convulsive form, and that they disappeared after two years of treatment. They did not interfere with his general health; and he attributed them to fatigue after severe study. Patient belongs to a healthy family, and there is no trace of any neurotic disposition.

The pathology of epilepsy came to my aid in the diagnosis of this case. Assuming, with modern authority, that epilepsy is the result of sudden and acute anæmia of the cortex, with congestion of the medulla, we may presume that in this case there is simply acute anæmia of the cortex, without notable congestion of the bulb. As it is probable that the conscious centres are

located in the cortex, and, moreover, that all the mandates of the mind are communicated to these convolutions, it is easy to explain the absence of conscious control and the occurrence of mechanical actions. The cortex—the bond of union between mind and matter, so to say—paralyzed, and the great ganglia in perfect condition, the movements are simply like the reflex spinal movements, and are called on in precisely the same manner. The diagnosis of this case seemed at first rather difficult, and I was inclined to believe it a case of catalepsy. The absence of rigidity, however, and the history of the patient, led me to class it among those cases termed "partial epilepsy," and in a late number of the *New York Med. Abstract* several such cases are cited and thus named. The treatment employed ultimately was based upon my pathological ideas, and then alone was it successful. I tried at first the anti-epileptic mixture of Brown-Sequard for two weeks, and the attacks were of frequent occurrence. I then thought of treating the cerebral anæmia, and gave the patient ½ gr. nitro-glycerine thrice daily. I followed in this the idea of Hammond of New York. The results were excellent. The fits ceased, and patient passed three weeks without a single seizure. At the end of that time he noticed a copious deposit of lithates in the urine, with a diminution of that secretion, and the following day two seizures occurred; both were very brief in their duration. I prescribed a mixture of pot. bicarb., and all went on well as before.

The patient left shortly afterward for Boston. At last accounts he was still well, and whenever the urine became loaded he had recourse to the potash mixture, and so the fits were averted.

Dr. Henry Howard took exception to the name of the paper, and said that it should be called a mild form of epilepsy. Another form was the marked epilepsy. He knew of a gentleman who has had attacks of this nature for ten years, but is not aware of the fact. He has a momentary loss of consciousness, with slight quivering of the muscles of the face. Another, a lady, has attacks which are not more severe than the aura of an ordinary epilepsy. She suddenly feels a something run up from the foot to the heart, and in a few minutes is perfectly well again. The

Italians have been writing much on epilepsy. They show that cortical epilepsy, when the lesion is in the motor area, always is accompanied with convulsions, which begin in the side of the face opposite to the brain lesion. The arm is next affected, then the leg, and last the trunk. When the lesion is in the peripheral or lower centres, then there are no general convulsions. In a pure case of cortical epilepsy, there must be biting of the tongue and relaxation of the sphincters.

Dr. Campbell, who has on several occasions spoken of the great benefit of nitro-glycerine in epilepsy, again mentioned his continued success with it, and related one or two cases where a wonderful change for the better has followed its administration.

Stated Meeting, May 15th, 1885.

T. J. Alloway, M.D., 1st Vice-President, in the Chair.

Atmospheric Materies Morbi.—Dr. Henry Howard read a somewhat lengthy paper on this subject, of which the following is a brief abstract:

We don't know, and perhaps we never will know, what were the characteristics of primordial matter, whether if atoms or molecules, or both together. Physical science teaches us that all the different degrees of matter have their own peculiar structure, consequently each has its own peculiar phenomenon, force or function, such as psychic, motor and sensorial. . . . . Now what do we mean by the term "atmospheric materies morbi"? The great physical scientist, Prof. Tyndall, demonstrated by the most conclusive experiments that the atmosphere was filled with floating matter, which, under favorable circumstances, produced a very low living animal organism, but he did not demonstrate whether it was mineral, vegetable, or animal matter, or all three combined. . . . . The question naturally suggests itself, how so many persons fall victims to these germinal diseases—typhoid fever, cholera, etc. Dr. Howard dwelt at some length upon the action of the toxic germ of cholera causing paralysis of the vaso-motor nerves, and concluded by saying that he thought the treatment must tend towards restoring those nerves to their normal state.

Correspondence.

To the Editor of the CANADA MEDICAL & SURGICAL JOURNAL.

DEAR SIR,—When I undertook to write you a letter from Berlin for the JOURNAL, I did not count on the difficulty which exists of seeing objects of general interest to the medical world through the windows of a chemical laboratory.

The "busy practitioner," as a rule, rather prides himself on having forgotten all his chemistry, while chemical formulæ have long ceased to recall anything but the headache and feeling of despair they once produced while being rapidly stored up for a primary examination.

As this is the greatest European centre for research in organic chemistry, there is, as one would expect, an enormous amount of work being done of interest to the medical public, but in the vast majority of the researches the chemical interest so far overshadows the medical that it is no easy task to find suitable material for such a letter.

The investigations regarding the relations and constitution of the poisonous alkaloids found during the decomposition and putrefaction of albuminoid bodies form, to the medical world, the most interesting and important subject now engaging the attention of European chemists. The brilliant experimental researches of Pasteur and Koch, while of the highest importance in themselves, have, unfortunately, created a frantic desire among pathologists to shine in the same field of research. The result is that every proud owner of a sterilized test-tube, a plug of cotton wool and a tame rabbit now poses before the public as a bacteriologist, and when he has transferred half the contents of his test-tube to Bunny's stomach and introduced the remaining half in various other parts of his victim's economy, Herr Dr. Bacteriologist proceeds forthwith to cover with the martyr's obituary eighteen or more pages of the *Berliner Naturwissenschaft Centralblatt.*

Fully as scientific and practical, though far less theatrical, have been the recent attempts to elucidate the phenomena of disease through chemical research about the nature of ptomaïnes.

It has long been established that the tissues of men and animals undergoing decomposition contain certain putrid principles or poisons. Attempts have been made at different times to isolate their toxic principles, but their unstable nature and the extremely small yield obtained from large quantities of putrid material,—owing to the defective processes employed—have until quite recently deterred chemists from undertaking research in this direction. Highly poisonous basic extracts were obtained, however, and their physiological actions partially studied. These syrupy extracts were found to possess toxic properties very similar to many well known vegetable alkaloids, especially atropine and curare; while others resembled in physiological action morphine, strychnine, conün and digitalin, or combined the action of two or more of these alkaloids. These cadaver alkaloidal bodies received from Selmi the name of Ptomaïne. They attracted attention at first owing to their possible confusion with vegetable alkaloids, many cases having arisen, especially in Italy, in which it could not be proven that alkaloidal poison found after death in cases of supposed homicide was not of putrefactive origin.

Commissioners appointed by the Italian and German governments to investigate these bodies, issued lengthy reports containing a series of color tests by Stass Otto and Dragendoff, which have, with a more complete knowledge of the nature and constitution of ptomaïnes, proved unreliable. Indeed all this early work on the ptomaïnes is quite unreliable, for two reasons: first, the substance used for the experiments was in no case a well characterized body, possessing a definite chemical individuality, but usually a syrupy extract; secondly, the methods used for extraction were highly unscientific, chemically, as strong, hot acids, and even glycerine, were resorted to in isolating these products. Nencki was the first chemist who isolated a basic product of decomposition and established its chemical individuality.—*Jour. f. Praktische Chemie.*, Bd. 26,'82.

In decomposing gelatin, he found a base which he obtained in crystals, and ascertained its formula to be $C_8 H_{11} N$. This collidin body is the first ptomaïne obtained in a pure state.

Lately, in decomposing fish, a Ptomaïne has been found by the French chemists Gautier and Etard identical with Nencki's base.

Since Nencki's important research much attention has been directed to the careful study of chemically pure Ptomaïnes. Owing to their occurrence elsewhere in dead bodies, the original signification of the word Ptomaïnes (Gr. *Ptoma*, a cadaver) has been extended to include all toxic alkaloidal bodies formed during putrefactive action.

Prof. Breger, of I. Berlin Med. Clinic, has during the past two years been engaged in isolating and studying these interesting bodies. To give more than a brief outline of his very successful researches would be out of place in a letter of this kind. First of all, from peptone, artificial and natural, he obtained a body similar, chemically, to a ptomaïne, but in a purer state, possessing very feeble toxic properties—Ptomopeptone. From putrid horseflesh, beef and human muscle tissue he has recently isolated an alkaloid of the highest interest, whether regarded from a chemical or pathological standpoint. To this body he has given the name of "Neuridin"; its formula is $C_5 H_{14} N_2$. As most of the recently isolated ptomaïnes resemble this substance very closely, whether obtained from putrid flesh, fish, gelatin or vegetable albumen, we may regard its physiological action as typical of this class of bodies.

Prof. Breger experimented with neuridin on frogs, rabbits, cats, guinea-pigs and mice, and has just published a detailed account of his observatiens.—(Berichte XVII., XVIII., and "Ueber Ptomaïne," 1885. Hirschwald, Publisher, Berlin.) Among mammals, cats were found to be most susceptible to this poison, and guinea-pigs least; but owing to the great difficulty with which large amounts of the chemically pure snbstance was obtained, accurate series of experiments were only performed on the frog and rabbit. Large frogs were found to react slowly to a dose of ·001 grm. (about 1-65 gr.), while ·002 grm. was invariably fatal.

Two to five milligrammes of the hydrochloride of neuridin was injected into the dorsal lymph sac of the frog. In 2-5 minutes

a spastic paralytic condition of the animal follows. To chemical, mechanical and electrical stimulants the animal at first responds, but later only certain sets of muscles react. The reposed heart at this stage is found still beating, even if the breathing has ceased. Systole short and weak; diastole lengthened, finally stopping in full diastole. At first the heart's action is quickened by the poison, and after it has ceased to beat it may for a time be renewed by stimulants and often by atropine. Atropinized frogs withstand, though not always, the action of neuridin. The action of this alkaloid on rabbits is very interesting.

A dose of ·005 grm. produces the characteristic symptoms, and ·04 grm. is invariably toxic. It immediately produces profuse alkaline salivation, with flow of mucus from the nose and lachrymation—the last temporary, while the salivation and mucus discharge continues till death. The respiration, at first quick and labored, (accessory muscles called into action) soon becomes shallow, irregular and less frequent. Its action on the heart of the rabbit is similar to that on the frog. It was noticed, however, that if the right and left vagus be cut beforehand no characteristic heart symptoms were observed, so the heart muscles were probably not directly affected. The pupils were usually contracted. Violent peristaltic action of the intestines, with local tetanic contractions, ensued with diarrhœa and profuse urination. Clonic spasms of the muscles, preceded by a singular weakness and trailing of the hind limbs, always followed on a lethal dose.

In cats, mydriasis is constant, and a very marked alkaline sweat always appeared on the paws. In every case a hypodermic of atropine put a stop to the symptoms.

Regarded chemically, neuridin is a very complex amine, and related to Cholin ($C_5 H_{15} NO_2$), Neurin ($C_5 H_{13} N O$), and Muscarin ($C_5 H_{11} N O$).

Among the list of recently isolated ptomaines, I can only note a few. Breger has obtained a body from putrid fish, $C_5 H_{11} N$, acting like muscarin, and having atropine as an antidote. From putrid horse-flesh, a ptomaine $C_5 H_{11} N$ has been isolated (Ber. XVI.) From excrementitious matter Prof. A. G. Pouchet ob-

tained $C_5H_{12}N_2O_2$ (*Comptes Rendu*, 97). Breger, from decomposing glue, got a body $C_5H_{14}N_2O$. Bocklisch, last February, obtained neuridin and a substance identical with muscarin from putrid fish (Ber. 18). In April Pouchet (*Comptes Rendu*, 99-100) obtained from cholera stools a ptomaine whose vapors exert a violently poisonous action, many of the symptoms resembling those of cholera.

In 1881, during a threatened epidemic of ergotismus gangrenosus, the Russian Minister of the Interior instituted a commission to investigate this phenomenon of ergot. A. Poehl, a member of this commission, has observed that the mycelium of Claviceps purpurea has the power of peptonizing the albumen of the seed with formation of ptomopeptones and ptomaines. The same power is possessed by a form of mildew which occurs on the maize, especially in Lombardy, and here the inhabitants suffer from an epidemic caused by the maize similar to ergotismus. This author has frequently obtained ptomopeptone from the action of penicillium glaucum on albumen of meal.

With regard to the genesis of the ptomaines, we may note :

(1.) These alkaloids are always associated with fungoid growth. Whether the fungus belong to the schizomyces—*e.g.*, bacteria, etc.,—or higher in the scale of plant organisms, such as penicillium glaucum, Claviceps purpurea, and the maize mildew, in every case an alkaloidal body resembling muscarin is the product of their growth on nitrogenous bodies.

(2.) These alkaloidal bodies belong chemically to a well-marked series of organic compounds, containing cholin, neuridin and muscarin, the different members of which are easily changed one into the other by simple processes of oxydation, hydration, and reduction, as the recent researches of Prof. Berlinerblan (Bericht 17) on the synthesis of muscarin from cholin fully proves.

The members of this organic group, like all complex amines, are decomposed into simple amines, then into ammonia, carbon dioxide and water by excessive oxydation. Furthermore, it is to be remembered that putrefaction is a process of oxydation, and that proteids rapidly putrefying or in an advanced state of

decomposition yield no ptomaines, but only simple amines, ammonia, carbonic acid and water. This last fact goes to show that these toxic bodies are one of the earliest-formed products of decomposition, and strengthens the probability of their formation during life by bacterial action.

(3.) The isolation of definite chemically-pure poisons, which are the result of bacterial action, has at least given something tangible and definite to replace the hitherto rather vague speculations as to the nature of the poisons produced by bacteria.

Prof. Breger, in a short note recently published, states that experiments now being made by him go to show that the variety of alkaloid produced depends on the nature of the food substratum—*i.e.*, that the same bacteria will split up a highly toxic body from one nitrogenous substance, and a comparatively innoxious one from another. The converse proposition—that different bacteria produce different ptomaines from the same food substratum—has been practically reserved by Gautier and Étard, and we may expect something of interest on this in an early number of the *Comptes Rendu*.

The only observations that I can find relative to the production of ptomaines during life is the rather unsatisfactory work of Prof. Pouchet above noted. I have purposely, in this rather lengthy notice of ptomaines, omitted what really forms the bulk of all the recent papers, viz., the theoretical interest of these bodies to chemistry and the improved methods of extraction now adopted. Abstracts of most of the papers (which appear in the *Berichte*), can be seen in the journals of the Chemical Society.

As that inquisitive individual, the "counsel for the defence," can make much capital out of the existence of these toxic alkaloids normally in the cadaver, it may be of interest to some readers of the JOURNAL to know that Prof. Marino-Gucco (*Gazzetta Italliana*, 13) has determined the toxicological question of the difference between ptomaines and vegetable alkaloids, as the hydrochloride of the cadaver-alkaloids is not decomposed by sodium bicarbonate. The ptomaine then remains in solution and the vegetable alkaloid is extracted in the usual way.

In conclusion, let me say that, whether we regard its possible influence on the theories of pathology and physiology, or its importance as a connecting link between abstract and physiological chemistry, the many-sided subject of the ptomaines is one promising an interesting and useful future.

Sincerely yours, R. F. R.

BERLIN, June 24th.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

A New Discourse on a Stale Subject.—It may be that the truly epochal events in the world's history take place quietly, unnoticed by contemporaries, and only brought to their merited prominence by the discerning hand of later historians. We believe that there is before us an illustration of this. In the domestic history of man we see at one end two forked sticks supporting a pole ; at the other the porcelain basin, traps, toilet paper, and all the other Sybaritic appliances of a modern closet. Standing half-way between is the heretofore unknown figure of Sir John Harington, who, in 1596, gave the world the earliest description of a water-closet, in a small pamphlet entitled " A New Discourse upon a Stale Subject." We are indebted to our ever-enterprising contemporary, *The Sanitary Engineer*, for a republication of the important document. Sir John wrote in a rude age, but the sensibilities of the people had not then been materialized and deadened by modern science, which now discusses with equal freedom the arrangements of a water-closet and the adulterations in candy. Sir John, therefore, introduces his subject in a periphrastic and half-apologetic manner. He remarks : " For when I have found, not only in my own poor confused cottage, but even in the goodliest and stateliest palaces of this realm, notwithstanding all our provisions of vaults, of sluices, of grates, of pains of poor folks in sweeping and scouring, yet still this same whoreson, saucy stink, though he were commanded on pain of death not to come within the gates, yet would spite of our noses, even when we would gladliest have spared his company, press to the fair ladies chambers ;

I began to conceive such a malice against all the race of him, that I vowed to be at deadly feud with them, till I had brought some of the chiefest of them to utter confusion; and conferring some principles of philosophy I had read, and some conveyances of architecture I had seen, with some devices of others I had heard, and some practices of mine own I had paid for, I found out at last this way that is after-described, and a marvellous easy and cheap way it is; and I dare speak it upon my credit, not without good experience, that though it be neither far-fetched nor dear-bought, yet it is good for ladies."

Having thus given a brief review of reasons and effects, Sir John describes in a vivid and realistic style the state of the closets of that period, and the methods which had so far been employed to avoid the malodorous results of defective sewage. It is interesting to note that our author is moved entirely by æsthetic feelings to gain the object which he seeks. There is no word regarding disease, but only of stenches and their unpleasantness. After many trials Sir John devised a water-closet, very much in principle like the modern ones. A tank of water above, a pan, a stop-cock, etc., are among the features of his invention, which is illustrated with some mediæval cuts. Whether his device became widely adopted historians do not say. These learned gentlemen tell us much of kings and battles, and but very little of the things that really occupied the thoughts and time of the people. But at any rate, we have Sir John Harington's invention at the present perfected and adopted to an extent no doubt far beyond the dreams of the philosophical student of the "Stale Subject." And certainly some credit should be given to a man who was the first apostle of sweetness, if not of light.—*N. Y. Record.*

Functions of the Membranes in Labor.—In a paper read before the Chicago Gynæcological Society, and published in the *Chicago Med. Journal and Examiner* for March 1885, Dr. H. T. Byford advocates a departure from the methods now taught, in the preservation of the membranes from rupture until they dilate, or aid in dilating, the vulva, as they are some-

times observed to do when they are unusually tough and the child is born with a "caul."

According to the present obstetric teaching and practice, as he understands them, the patient in labor is encouraged to go about the room until near the end of the first stage, thus, whether purposely or not, stimulating the uterus to contraction, and adding gravitation to the other forces that bear upon the membranes in the cervix. This practice, with subsequent pulling at the os with the finger, or pressure upon the abdomen whenever the pains lag a little, or both, often has for its effect the discharge of the amniotic fluid at, or near the end of, the first stage. If, however, pursuing an opposite course, the patient is put to bed upon her side as soon as, or soon after, the os commences to dilate; and if the pains are more severe than can be easily borne (as they are apt to be in highly civilized communities), an opiate, or other anodyne, is given to keep her comfortable, the presenting bag will be relieved of the weight of the abdominal contents, and saved from the more intense and frequent action of expulsive powers that accompanies an erect or semi-erect position.

After the os is widely dilated, and the membranes receive but little support from the cervix, they will be less liable to rupture if we put the patient upon her back during uterine action. The head will be better able to form a ball valve, and thus take part of the pressure from the presenting pouch, viz., as much as is required to overcome the elasticity of the ring of the cervix against which the descending head impinges. Now, after the os is widely dilated, when the resistance to the descent of the head is small, and the consequent strain upon the protruding membranes great, a change occurs which invalidates the reasoning by which some of the German authors would make their rupture, or the bringing of labor to a stand-still inevitable at or near the complete opening up of the uterine neck. The membranes, being loosened from the lower segment of the contracting uterus, are pushed down through the dilated cervix along with the head, instead of being merely stretched; they come in contact with the undilated vagina and are supported by it; and as the whole

parturient canal is converted into one cavity, the head follows the bag of waters down to the vulva, just as it followed it down to the external os, aiding in the dilatation, and sharing the pressure from behind. The second stage of labor becomes a kind of repetition of the first, the dilatation of the vagina and vulva being an analogue of that of the cervix and external os.

The membranes, with such management, are subjected to no more strain during the second stage of labor than they are under the prevalent mode of treatment during the first stage. In fact, the pressure upon the membranes under the ordinary start-on-the-run management is not usually sufficient to rupture them as early as is commonly supposed. In Dr. Byford's experience, they have either ruptured at or near the beginning of labor or else persisted after the os has been dilated. Students are taught to rupture at the end of first stage; and nearly all the physicians that he has consulted usually find it necessary to do the same. Indeed, recent graduates are apt to betray a thrill of pride at the recital of the number of times they have successfully performed this hair-pin obstetric operation.

When the membranes, he goes on to say, are ruptured at the end of the first stage, there results, after a temporary rest, a rapid and very great change in the character of the labor, but when they are preserved from rupture it is impossible to tell, without the finger in the vagina, when the first stage ends and the second begins. The torment that belongs to the stretching of the cervix subsides, and the labor gradually assumes a straining character, but only at the last moment, after the vulva is dilated to half or two-thirds of the size necessary for the exit of the head, is that severe suffering felt, of which primiparæ are otherwise wont to complain as soon as the head commences to bulge the perineum, or even after. The vagina is filled with a tumor so smooth and soft that its presence cannot be felt by the patient at any one point, so elastic that a light finger touch indents it, and yet the whole power of almost every uterine muscular fibre bears efficiently upon it. It is strange, he thinks, that obstetric science can teach the deliberate breaking up of this simple process of nature and the substituting of an unnatural

and artificial one, by which nearly all of the fibres of the lower half of the uterus operate only to contuse its own structure against the bare parts of the fœtus without materially aiding in its descent, while the fibres of the fundus jam the hard, rough, inelastic and comparatively unyielding head down through the vagina against the perineal centre, bulging and stretching the perineum, according to Lusk, from "four to five inches in its antro-posterior direction," and all of this without any provision for a gradual dilation of the vulva, or of making its axis, before delivery of the head, correspond with the axis of the pelvis.

After speaking of the mechanism of dilatation of the perineum and vulva, by means of the membranes, he gives the following other reasons for keeping the membranes intact: Malposition of the head in the pelvis can more often be determined before rupture, and be corrected with greater facility. The body of the child cannot easily be grasped by irregular or tonic contraction of the uterus, as it occasionally is after rupture, when the parts of the child impinge upon the interior of the uterus—a condition of affairs which, when present in only a slight form, sometimes renders impossible the rotation of the occiput forward without disastrous twisting of the child's neck. The cord is much less liable to prolapse, and, if prolapsed, can be more easily made to slip back into the uterus.

He then concludes as follows: After having ruptured them too soon in a number of instances, I now wait until the head threatens to come through with the membranes intact, and, in order to keep them so until then, I advise my strong patients not to bear down much, or else give a little chloroform with each pain. We can usually, by thus diminishing the pressure, delay rupture long enough for the head to be delivered with or between the succeeding pain or two. The uterus not having been long in direct contact with the fœtus, the least possible injury will occur to each; the vagina will have suffered neither from dragging down nor friction, nor will the hemorrhoidal circulation be long interfered with. But above all, the perineum will have been taken care of, and Goodell's riddle of the sphinx be solved. Whenever the membranes rupture before their office of dilating the vagina or

vulva is completed, a strong or covered rubber-bag may be introduced and then inflated with water or air, until it fills the lower unoccupied part of the vagina, so as to be made to dilate the vulva, during pains, somewhat after the manner of the membranes themselves. When a rubber-bag is not at hand, the vulva can be partly dilated by two or three fingers placed in the vagina and pressed backwards gently, but firmly, with each pain, and the capping of the head by a membranous perineum, wherein lies the chief danger to its integrity, be prevented.—*Gaillard's.*

Treatment of Cholera during the Algid Period.—Doctor Georges Rigoletti attributes the principal symptoms of the algid period of cholera, such as lowering of the temperature of the exterior of the body, cyanosis, change of countenance, inextinguishable thirst, difficulty of respiration, epigastric constriction, hiccough, vomiting, muscular cramp, prostration, general collapse, and paralysis of the heart, to a lack of the normal proportion of water in the blood. Two indications correspond with the symptomatology :—

1. To restore to the tissues their normal water, and to the blood its normal serum, in order that it may perform its functions.

2. To excite the nervous force and to stimulate the heart. To fulfil these regulations Dr. Rigoletti proposes the hot bath, containing ammonia and wood ashes.

The bath is prepared with water of a temperature ranging from 100.4° F. to 104° F.; about one quart of aqua ammonia and a sufficient quantity of wood ashes. The duration of the bath is from fifteen to twenty-five minutes, and it may be renewed in the same day, and for many days in succession, according to the case. To avoid the ammoniacal vapors, the patient is so covered as to prevent their reaching the head. The patient, on being removed from the bath, is covered with warm blankets, which favor and maintain reaction. Frictions with camphorated alcohol are also to be practised, and aromatic infusion of chamomile and spirits are to be administered. If the reaction comes on too violently, it is to be moderated by

ordinary measures. The efficacy of the bath is more prompt when the algid state is least advanced. The method was used in 1884 with much success in the epidemic at Naples, and the official report as to its value is as follows:

1. The hot alkaline bath administered at the beginning of the algid period stimulates the peripheral circulation and increases the power of reaction.

2. The nervous forces are strengthened; the patient is so much relieved that many times during the day he requests the bath; the constriction of the epigastrium diminishes and disappears.

3. The pulse, often imperceptible, is gradually strengthened; the features become more natural, and the face even sometimes becomes flushed. Anuria almost always ceases in the bath.

4. Diarrhœa continues, but the vomiting and hiccough disappear with the administration of the bath.

5. The ammoniacal vapors excite cough and interfere with respiration, and for this reason it is necessary to protect the patient from them. However, the effect of the vapors is beneficial in that they increase the power of the voice, and render it less rough and more intelligible. In conclusion, the hot alkaline bath is a powerful therapeutic agent in the algid period of cholera, and its effects are most constant.

Dr. Rigoletti concludes his paper by stating that reaction, under treatment with the bath, is always *prompt*, occurring within twenty-five minutes; *complete*, as shown by the disappearance of all algid symptoms, and *constant*, having never failed in twenty-three cases in which the algid condition was treated by its use. He considers it the remedy, *par excellence*, for the period of the disease, and much superior to the intravenous injections of salt water proposed by Dr. Hayem and to the subcutaneous alkaline injections of hot water suggested by Prof. Cantani.—*Journal de Médecine de Paris*, May 10, 1885.

Tuberculosis.—A very striking example of the possibility of the transmissibility of tuberculosis from man to animals lately occurred at a farm at Charenton, which is situated just

outside Paris. One of the farm servants who had charge of the poultry-yard was phthisical, and in coughing used to expectorate a quantity of sputa, which the fowls were observed to swallow. In a few weeks, the owner of the farm having remarked that the fowls died in rapid succession, took one of the latter to the veterinary school at Alfort to ascertain the cause of this extraordinary mortality among his poultry. M. Nocard, one of the professors of the veterinary school, examined the fowl and found that the lungs and liver were infested with tubercles about the size of a pea, and of a yellowish gray color. Numbers of bacilli were also found in the microscopic preparations. The fowls were killed and the poultry-yard disinfected, which a less scrupulous farmer would not have done.

—In the fourth supplement to the "Transactions" of the Sei-I-Kwai, Mr. K. Takaki, F.R.C.S., Director-General of the Imperial Japanese Navy, contributes a paper on the cause and prevention of *Kak'ke*, or beri-beri. In the year 1883 a very large number of cases occurred amongst the men in the ships of the imperial navy, about a fourth of all the men employed having been attacked, and on board one ship, in a single voyage, out of 278 men 161 were attacked and 25 died. A searching enquiry into the possible causes of the disease led to the belief that it was mainly due to a deficiency in nitrogenous articles of diet and excess of the carbo-hydrates; the daily average of the sailors being in the proportion of one part of nitrogen to twenty-eight of carbon, instead of one to about fifteen. In order to test the correctness of this view a second ship was fitted out and sent exactly the same trip as had been taken by the former vessel when the outbreak took place, but the diet was so regulated that the proportion of nitrogen to carbon taken by each sailor was one to seventeen. On this voyage four cadets and ten men were attacked by the disease, none of the cases, however, proving fatal. It appeared that the four cadets had been unable to take their weekly allowance of one pound of condensed milk, whilst eight out of the ten men had not been able to take their allowance of meat in the same

way as their companions. so that the occurrence of these cases served to confirm the view that the disease was due to a defective diet. In the year 1884 these views were carried into effect, as far as possible, with the result that the percentage of cases fell from 25 to 13.—*Londou Medical Times.*

Something New under the Sun—Interna Spina-Bifida.—Dr. Thomas was consulted by a married lady, aged 28, two years married, but sterile. She complained of nothing but pain in sacral region, and sense of weight. On examination he found a sac filled with fluid, occupying the cavity of the sacrum, and pushing the rectum aside slightly, but in no way occasioning serious inconvenience. He believed the failure to conceive was due, not to the pressure of this tumor but to a congenital sharp anteflexion, and advised non-interference. The case stumped the doctor—he didn't kuow what to make of it—though he examined the case repeatedly, at intervals, for two years, when he lost sight of it. Some time afterwards he was consulted by a beautiful girl, 19 years of age, who appeared to be perfectly healthy, but who suffered from dysmenorrhœa. She was engaged to be married and she and her mother were anxious to have any impediment removed that might be in the way, and hence the consultation. Dr. Thomas found a sac filled with fluid, situated in the curvature of the sacrum, and impigning on the vaginal canal to such an extent as to almost completely occlude it, and this, the doctor thought, was the cause of her dysmenorrhœa. He strongly advised non-interference, stating that in view of the obscurity of the case radical measures were not justified. Mother and daughter insisted, and finally the doctor consented to a compromise—he would aspirate the sac. He did so with the smallest-sized Dieulafoy's needle, drawing off eight ounces of perfectly limpid non-albuminous fluid, which was submitted to Dr. Garrigues for examination. Dr. Garrigues declined to give an opinion of the nature or source of the fluid. The effect of this operation was alarming; the girl was thrown into violent fever with headache, which lasted several days. This was attributed

to the "thief in the community," malaria, and treated with quinine and morphia hypodermically. Some six months afterwards, the patient and her mother called again: the sac had refilled, and they renewed their importunities for an operation. Dr. Thomas was strongly impressed with the impropriety of any operation, especially in view of what has just been related, and was possessed, he says, of a strange feeling of dread and fear. However, he yielded. He would open the sac, and establish drainage. With proper assistance, patient in lithotomy position and anæthetized, Dr. Thomas made an incision into the sac and stitched the edges to the vaginal opening. There was discharged about half a pint of the same clear fluid, resembling hysterical urine. In five hours, at 5 p.m., she was seen by Dr. DuBois, one of the assistants; severe headache and marked tendency to hysteria. In the morning, headache more severe, pulse 110, temperature 102. In the evening, symptoms same, with a peculiarly wild and maniacal expression. Still the doctor did not suspect the real nature of the case. Next morning all symptoms were favorable, but in the afternoon the physician was summoned in haste to see her. Found her in a condition bordering on hysterical mania, with a pulse of 120 and temperature 104, with strong tendency to opisthotonos, and showing marked signs of incipient tetanus. "Now," says the doctor, "there suddenly flashed across my mind the full recognition of the case; an exactly similar one, which had occurred to Dr. Emmet in the Woman's Hospital, came back to my memory, from which, until now, it had been entirely effaced; and, as if a curtain had been lifted, I saw clearly what had, until this moment, been so obscure. I had opened a sac formed by the meninges of the cord, which had projected through an imperfection in the sacrum, into the pelvic cavity. The membranes of brain and cord were deprived of the rachidian fluid, and the consequences were before me! I at once collected my assistants and anæsthetized the patient with chloroform, and sewed up the opening in the sac. * * * * Whether from chloroform narcosis or not I cannot say, but for some hours after this the patient markedly improved, and I had great hopes that I

had retraced my unfortunate steps in time; but about twelve hours afcer the closure of the sac the heart suddenly failed, opisthotonos occurred, the patient shrieked from severity of her cephalalgia—and died!"

In the conclusion of this most interesting record, Dr. Thomas says:

"Where a cyst is found in the pelvis, behind the rectum, filling the hollow of the sacrum, apparently attached to that bone, let the diagnostician carefully exclude the possibility of its being spina-bifida before interfering with it.

2. "If it be decided to interfere with such a tumor, let a small portion of the fluid be first drawn by a hypodermic needle, and if this be found to be a limpid, non-albuminous fluid, let the probabilities of the sac being connected with the meninges of the cord receive due consideration, and guard against further interference."—*American Medical Digest.*

Episiotomy in the Iparæ.—We are in receipt of a pamphlet, a reprint from the *Amer. Jour. of Obstetrics*, Vol. XVII, No. 3, 1885, by W. P. Manton, M.D. (Harvard), Detroit. It is entitled, "A Plea for Episiotomy." It seeks to show that episiotomy should be more frequently resorted to than it is, and adduces numerous statistics to support the proposition. He says it is particularly valuable in iparæ, and intimates that if iparæ were more generally accorded the benefits of episiotomy, the occasions for perineorrhaphy would be materially diminished. Episiotomy is, therefore, something which should become immensely popular with iparæ. Don't know what episiotomy on the ipara is? Dr. Manton tells you in his pamphlet that it consists in making an incision with a probe-pointed bistoury, or scissors (he prefers the knife), on one or both sides of the frenulum, about three cm. above its middle. Iparæ is, we suppose, gynæcological for primiparæ. The ingenuity of the gynæcologist in the direction of word-making is really something wonderful. He has knocked the ophthalmologist completely out, and the ophthalmologist is not to be sneezed at by any means.—*Ed. Medical Age.*

The Use and Abuse of the Tampon in Abortion.—The tampon as a means of arresting hæmorrhage from the cavities of the body or from wounds has been known to the profession for many years. It seems a very natural thing, when blood is escaping with dangerous rapidity, to apply a plug of some sort to stop the leak. There are some things to be guarded against, however. That the bleeding is actually arrested, and not merely diverted into another channel, is of primary importance. Again, there are conditions in which the plug may do mischief. As applied to uterine hæmorrhages, these two elementary principles are so well known that no one will question the correctness of either. A woman with the vagina firmly plugged may bleed to death into the cavity of the uterus. A tampon allowed to remain too long may do harm in various ways. A tampon injudiciously applied may precipitate the catastrophe it was intended to avert. Of this injudicious application of the tampon in cases of threatened abortion it is the purpose of this paper to treat.

Dr. Keene then quotes the views of Leishman, Playfair, Tyler Smith, Cazeaux, Shröder, Lusk and others and says: Now, out of this mass of authority, sometimes conflicting, but generally unanimous, what deductions are to be drawn? That the tampon is to be used as a last resort, and only where the hæmorrhage is dangerous or the abortion clearly inevitable. We have, moreover, the observation of so experienced an obstetrician as Shröder, that the hæmorrhage of abortion is seldom dangerous and scarcely ever fatal—a view which Lusk seems to share. Of course, in their hospital experience, a physician is always at hand to meet any emergency, while in private practice, and especially in the country, another condition of things prevails. Yet it seems that enough has been said to indicate plainly that the routine practice of plugging, in threatened abortion with but slight hæmorrhage, merely as a precautionary proceeding, has no countenance from the authorities.

Besides the natural bias of the physician's mental makeup—his individual personal equation—his views will vary as his

experience has been large or small. To a beginner, the loss of a slight amount of blood from the uterus of a pregnant woman is fraught with direful forebodings. As his experience widens, hæmorrhage will become dangerous less frequently, abortion will take its place under the inevitable class with much less facility, and the tampon will be employed only to fulfill its two legitimate indications.

The young practitioner is not the only offender in the over-free use of the tampon. His older brother may well look to the well-worn grooves in which his practice moves more or less smoothly to discover whether he, too, is not a devotee of the tenet that the fœtus has no rights which the physician is bound to respect. The tampon is legitimately employed only when for good and sufficient reasons it is necessary to terminate gestation.—*Dr. J. W. Keene in New York Med. Journal.*

Gross on Gonorrhœa.—In the early treatment of gonorrhœa, Prof. Gross condemns the use of injections. His plan is as follows:—If possible, put the patient to bed; give him at the outset a purge, by administering Epsom and Rochelle salts, each ℥ ij·, in lemon syrup. Allow no meat or any stimulating articles of diet, etc. Malt liquors do more harm than alcohol, so interdict both. No tea or coffee, but give him milk, eggs and some oysters, etc. Three times daily he is to hold the penis in a cup of hot water—quite hot. Keep the organ there for five minutes at a time, then wipe it gently each time.

The internal treatment will be by the "antimonial and saline mixture." ℞. Antimonii et potassii tartrat., gr. 1-10; magnesii sulphatis, ℈ij.; morphiæ sulphatis, gr. 1-16; tinct. aconiti radicis, gtt. j.; liquor potass. citrat., f ℥ ss.; olei limonis, gtt. ss.; elixir. simplicis, f. ℥ ss. M. Sig.—Ter die.

By this treatment the urine will be rendered bland and unirritating. Should the urine persist in "scalding," then add to the above prescription gtt. x tinct. cannabis. indicæ. To prevent or cure chordee, order at night a suppository of: ℞. Extract. opii; camphoræ, āā gr. iij.

In the course of four or five days the discharge from the

urethra will look more like laudable pus ; then order an injection : ℞. Hydrargyri chloridi corrosivi, gr. ij. ; aquæ destillat., O j. Sig.—With a syringe that holds an ounce, inject into the urethra—having first "flushed" the canal several times by voiding urine—and retain the fluid for five minutes..

Internally, a useful combination is that used at the out-door department at the hospital, and consisting of: ℞. Cubebæ, ℥ ij. ; alum pulv., ʒ j. M. Sig·—Of this take a heaping teaspoonful in a tumbler of water ter die ; the dose to be increased.

Should the discharge per urethram still persist, use an injection of ; ℞. Liquor. plumbi subacetatis, f. ʒ j. ; aquæ, f. ℥ x. M. Or: ℞. Plumbi acetatis, gr. ij. ; zinci sulphat., gr. iij. ; aquæ, f. ℥ j. M. Or : ℞. Acidi tannici, gr. ij. ; aquæ, f. ℥ j. M.—*Coll. and Clin. Record.*

Syphilitic Phthisis. Does it exist?—Dr. Frederick S. Shattuck, of Boston, in his report on Progress in Medecine, published in the *Boston Med. and Surg. Jour.*, March 5, 1885, quotes from Hiller and says:—It has long been known that syphilis may attack the lungs ; but a vast deal more has been heard of pulmonary syphilis since the question was broached whether the direct cause of the characteristic lesion of phthisis—caseation and cavity formation—may not sometimes be the venereal virus : that is to say, whether there is not also a syphilitic phthisis.

After a careful critical study of all the literature of the subject and also of three cases under his own observation, Hiller concludes that there is, as yet, no clear scientific proof of the existence of such an affection. In the reported cases of syphilitic phthisis sufficient evidence is lacking either of the destructive and ulcerating nature of the pulmonary process or of the syphilitic origin of the same. Those cases in which the diagnosis was apparently confirmed by the autopsy were really simply combinations of syphilitic with either phthisical or bronchiectatic lesions.

The anatomical changes in the lung chargeable to syphilis are cicatrices, connective-tissue growth, gummata, and chronic

induration of the pulmonary tissue in the form of peri-bronchial growths, nodular formations, and diffuse lobular condensation, which generally start from the bronchus of the part (diffuse syphilitic infiltration).

The diagnosis of these changes during life may be made with a certain degree of probability at times, but can never be made with certainty. The shortness of breadth, cough, scanty and sometimes bloody expectoration, and other signs, rational as well as physical, are so wanting in characteristic peculiarities that the syphilitic nature of the affection cannot be made out from them. The diagnosis is to be based rather on the history of the case, the presence of well-known symptoms of general syphilitic infection, and laryngoscopic examination, which will reveal in nearly all cases of pulmonary syphilis old lesions of the upper air-passages.

Irrigation of the Stomach in Ileus.—Kussmaul has introduced a new method in the treatment of intestinal obstruction and reports four cases in which success followed the above-indicated simple practice after all other measures, such as the opium-treatment and the application of rectal injections, had proven of no avail. The favorable action of the washing out of the stomach is due to the removal of the fluid, when it is withdrawn, of large quantities of fecal matter. Thus the intestine is unloaded, the peristaltic action is quieted, nausea and vomiting arrested and the cleansed stomach rendered capable to retain nourishment. A large, soft stomach-tube is inserted and copious quantities of water so introduced. In one of Kussmaul's cases the obstruction was relieved by a single irrigation, that brought away five quarts of intestinal contents. In another case complete relief was secured after irrigation twice a day for 23 consecutive days.

The observation of the foregoing cases demonstrates that the irrigations may be palliative in all cases, and curative in those that present no insurmountable occlusion. The palliative effects consist in the relief of the singultus and the feculent vomiting. To this end the method is a rational one and deserves preference

to the usual mode of giving opiates, ice, etc. The irrigation not only cleans the stomach but also the upper intestine. It appears that in such conditions of obstruction the pylorus relaxes and the water introduced passes readily into the duodenum. The directly curative effects Kussmaul explains as follows: (1) The removal of the stagnating intestinal contents relieves the distension of the upper sections of the intestine; the pressure within the abdominal cavity is thus materially reduced, and more room is afforded. (2) Thus the peristaltic action above the obstruction, that was violent and irregular, becomes normal and quiet. (3) The restoration of a normal peristaltic movement may accomplish relief in cases of twist or intussusception, *i.e.*, cases in which the occlusion is not absolute.

Senator adds that when the stomach and the upper small intestine is much distended by irritating fluid and gaseous contents, the peristaltic action becomes paralyzed and the intestine relaxed. The removal of the fluid and gaseous contents, however, restores the normal conditions and normal peristaltic motion in the relieved intestine follows.— *Weekly Med. Review.*

A Method of Averting Syncope.—It is well that we should always be prepared to avert what may or may not prove to be a serious, or even fatal, syncope. In persons whose hearts are weak, fainting or syncope is not at all uncommon, and may be produced by very slight causes. Hence we reproduce the concluding paragraph from an article on the subject by Dr. Wm. J. Notely, in the *Lancet*, March 14, 1885.

"Now, in all cases where the syncope is not complete, and where the heart continues to act, though feebly, measures are taken to restore the patient by adopting such means as are calculated to strengthen the action of the heart and facilitate the flow of blood to the brain. In many cases a person accustomed to faint from slight causes will be able to avert the syncope by adopting such means, and it is for this purpose that I wish to draw attention to the efficacy of heat applied to the head. In a person with a weak heart, syncope may be produced by simply sitting with the feet in hot water, and, in like manner, it may

be averted by application of heat to the head. Any-one may convince himself of this by first producing faintness in himself artificially. This may easily be done by getting into a bath of 110° F. In a few minutes he will begin to feel faint. Let him then plunge the whole of his head except the nose and mouth beneath the surface of the water, and in less time than it has taken to bring on the faintness all the disagreeable sensations will cease, and he will now be able to continue in the bath, perhaps for half an hour longer, without any inconvenience. From this it would appear that the application of heat to the head is a measure of some value in averting a threatened attack of syncope.—*Med. and Surg. Rep., April* 11, 1885.

Carbolic Acid in Indigestion.—Dr. Edward Berdoe writes as follows to the *Brit. Med. Journal*:—"I have lately treated several cases of indigestion with carbolic acid, and the results in each instance have been so fortunate that I am anxious to add the results of my experience. I have found it most useful in that form of dyspepsia known as fermentative, accompanied by constant sour rising and eructations of gas, with pain after meals, and discomfort, even after drinking milk or cocoa. My attention was first directed to it by Dr. Fenwick, who gave the glycerine of carbolic acid (1 part of crystallized carbolic acid to 4 parts of glycerine). The dose is from five to ten minims in mint-water, or other convenient vehicle. As it mixes well, I think it a more safe and elegant form than a solution of the acid in water only. When there is much pain of the stomach after food, I have found it useful to add five or six minims of the liquor opii sedativus to each dose; and when there is want of tone in the seat of digestion, and bad appetite, five or ten minims of the tincture of nux vomica will often be found serviceable, I have found these remedies also very valuable in the above combination in cases of pyrosis, where, I think, the sedative influence of the carbolic acid on the mucous membrane is far more useful than the bismuth one usually given in such cases. It is an interesting subject of inquiry whether the carbolic acid acts by arresting fermentative changes in the stomach, or by its well known anæsthetic influence on mucous

membranes. I have long given one-grain pills of this remedy in cases of vomiting from various causes, and have rarely found it fail to arrest it. In some of these cases there was no fermentative condition of the contents of the stomach; some of them were cases of reflex vomiting; yet all were, with few exceptions, greatly benefited. It would be desirable that the subject should be still further discussed by those who have had experience of the drug."

Vinegar in Diarrhœa and Dysentery.—Premising that Dr. John H. Brinton used to recommend, fifteen years ago, injections of cider vinegar in gleet, we note the following practical contribution from Dr. Amos Sawyer to the St. Louis *Medical and Surgical Journal*, January, 1885: "About a quarter of a century ago, when giving me some good advice for a young practitioner to follow, the late Dr. B. F. Edwards, of St. Louis, Mo., whose accuracy in the measurement of the action of remedies, truth in statement, and justice toward the members of the profession, made him a shining light in the early history of our State, among other things, says:—'Never make fun of an old woman's remedy, for not only will you give offense and thereby injure your practice to the extent of her influence, but you may throw away what would have proved upon trial to be a valuable adjunct in your practice.' He then cited this case to illustrate the importance of his injunction: 'In 1839, while practicing in Madison county, Ill., I was induced by the representations of *an old woman* to make the trial, in dysentery and diarrhœa, of tablespoonful-doses of *pure cider vinegar*, with the addition of sufficient salt to be noticeable, and it acted so charmingly that I have never used anything else.' He was prescribing it in 1870, making it a period of forty years."—*Medical and Surgical Reporter.*

Chloral Hydrate for Chordee.—In the *Med. Age*, Dr. Morris C. L. Kitchen says that for two years he has been using chloral hydrate, gr. x., potas. bromid., gr. v-x to aq. dist. ʒ j. as an injection for chordee, and has *never* known it to fail of affording perfect relief. He usually adds morph. sulph., gr. ij. to the ʒ j.

CANADA

Medical and Surgical Journal.

MONTREAL, JULY, 1885.

THE SMALLPOX.

In the month of April last we made a few remarks upon the outbreak of smallpox in this city. The disease was then confined to a very few localities, and the Health authorities were doing all in their power to prevent its extension. We were at that time justified in expressing the hope that their efforts would be successful. Unfortunately, this has not been the case. It has rapidly spread until up to the present time at least 100 cases are known to have occurred, and 61 deaths. The history of the outbreak is of a most lamentable kind. It will be remembered that two imported cases found their way to Montreal from Chicago. One went to the Hotel-Dieu, the other was taken to his own home. In the latter case, although the disease was communicated to others in the same house they were all well looked after, and as far as that case was concerned it was stamped out. The actual epidemic, therefore, is entirely traceable to the hospital case. Where a single case has to be dealt with, there ought to be no sort of difficulty in taking such instant, careful, precautionary measures as would ensure the safety of a community. The strictest isolation in the sense in which that is understood by every educated medical man, and the destruction of all fomites, will, in careful hands, assuredly give the desired result. There is good reason to believe that these measures were not adopted in the Hotel-Dieu, but that access to the patient was freely allowed to a large number of persons. Some of these took the smallpox and several deaths occurred. Patients even in distant wards sickened, and were conveyed to

the Civic Hospital Finally, it was decided to close the hospital, and all who could be, were discharged. This was a most unwise proceeding. Several of them developed smallpox, and have aided in establishing foci of the disease in various quarters of the city—the result, as stated above, being that we are now suffering all the discredit of a city afflicted with the dreaded scourge. Compare this with other cities. In Boston, *e. g.*, in the four years from 1870 to 1873 there were 1100 deaths from smallpox; in the eleven years since 1874 only 26. A correspondent, writing recently from Boston, says:—"We have had this spring about half-a-dozen cases of this disease, apparently developed from three or four different sources." *There*, however, each case as it occurred was promptly removed to the special hospital, and it *never got a foothold.*

What was the reason for this absence of all sanitary precautions in the original case? It has been stated, and we see no other possible explanation of it, that it was looked upon as chicken-pox and that its real nature was only admitted upon the occurrence of undoubted smallpox of severe type amongst those who had been in contact with the patient. We can only say, however, that seeing that the physician who first saw the man pronounced it varioloid, it would certainly have been wiser on the part of the hospital authorities to have acted accordingly, even supposing the former to have been mistaken.

In connection with this matter it is very pertinent to enquire what regulations are in force at the office of the Board of Health. The day after the affected man arrived in Montreal, the physician who had procured his admission into hospital made a formal report to the Sanitary Inspector that a case of smallpox was known to be in the city (stating where he was). Of so little consequence, however, did this statement appear to be that, *weeks afterwards*, neither the Chairman nor the medical Health officer were aware of its occurrence, nor were any enquiries instituted or suggestions made with reference to preventing its spread in the vicinity. Surely such things should not be. It is devoutly to be hoped that, under the new *regime* at the Health Office, a repetition of such laxity will be impossible.

As many persons have a strong prejudice against allowing members of their families to be taken to the Civic Hospital, we may quote the following remarks from the Boston letter of the Philadelphia *Medical Times*:—

"The hospital at West Roxbury, far from being a pest-house in appearance, more nearly resembles an artistic suburban school-house. Here the policy of the city physician has been to give the patients, one and all, the most luxurious treatment at his command. The patients are given anything (in reason) that they ask for, and doubtless many of the poorer classes receive more dainties of food and drink than they ever saw before in their lives. But the desired effect has been produced. The quality of the accommodations and the treatment are pretty generally known among the lower classes of the city, and there is now no reluctance shown by any one who is taken with the disease to go there for treatment. Ignorance, prejudice, and fear, which formerly led to the concealment of the disease and thus imperilled a whole community, are now disarmed, and prompt information, removal, and isolation have borne good fruit in the stamping out of an epidemic which might have attained formidable proportions."

THE INTERNATIONAL MEDICAL CONGRESS.

The new Congress Committee of the American Medical Association met in Chicago on the 24th ult. Acting on legal advice, the original committee of seven decided to go to Chicago and act with the newly-appointed members. Several of the ablest lawyers in the country gave opinions to the effect that the American Medical Association possessed full control and power in the matter. The upshot of the meeting is a lively row. The chief change made in the sections was the removal of all new-coders from office, thereby displacing, among others, the chairmen of sections on Diseases of Children and on Laryngology—Drs. Jacobi and Lefferts of New York. Dr. H. I. Bowditch of Boston, on account of alleged new code sympathies, was also removed from the office of Vice-President of the Congress. The

membership of the Congress was limited to delegates from the American Medical Association and societies in affiliation with it. A complete change was made in the Executive Committee. Dr. Billings resigned the office of Secretary-General, and Dr. Packard of Philadelphia was nominated for the office. No sooner were the proceedings of the Chicago meeting made known than the members of the profession in the eastern cities interested in the organization met and expressed their emphatic disapproval of the action by unanimously refusing to have anything to do with the Congress under the present *regime*. We happened to be in Philadelphia on the occasion of the meeting in that city, and found that the leaders of the profession were of one mind in their determination to withdraw. Similar resolutions have been passed in Boston and Baltimore, and we may say that the majority of the men eminent in scientific medicine and surgery in the United States have decided to hold aloof from the Congress. When we ask why they take this serious step, we learn that they have, in the first place, a deep distrust of the American Medical Association as an organization which could satifactorily carry out such an undertaking, and they have a still deeper distrust of the success of any congress where the best known scientific medical men of the country have been replaced by nominees such as Drs. Cole, Shoemaker, and others. The exclusion of the new-code men is felt to be a serious mistake, as carrying the quarrel of the American Medical Association into the International Medical Congress and refusing the fellowship of men with whom old-coders in New York are glad enough to consult. All, too, resent the insult offered to such a veteran as Henry I. Bowditch of Boston, who has devoted half a century to the advancement of the best interests of the profession in the United States.

What the result will be it is difficult to predict, but it is hard to see how a Congress can be held without such men as those who have signified their intention of resigning. It would be like a Congress in London without Paget, Lister, Jenner, Gull, Hutchinson, &c.; and we fear that when the profession in Europe hears of these dissensions, and the withdrawal of the very men

they would be most anxious to meet, many who otherwise would have come will elect to stay away.

REMARKABLE CASE OF PERIODICAL PARALYSIS OF THE FOUR EXTREMITIES.

On the 8th of June last, Prof. Westphal gave an account before the Berlin Society for Psychiatrics and Diseases of the Nervous System of a case of recurring paralysis of the four extremities in a boy twelve years of age. The patient was admitted into the Charité Hospital on the 15th of last March with one of these attacks, which came on suddenly the day before his admission. He first felt weakness in his right foot, and a quarter of an hour afterwards he was unable to walk or even stand. A few hours afterwards both arms were powerless. He complained of a pricking sensation in his legs. His arms were free from any disordered sensations. He was thirsty, and troubled with frequent desire to micturate. On the morning after his admission, there was complete paralysis of all four extremities without contractures. The cremaster and the skin reflexes, with the exception of the plantar, were present. The patellar reflexes were also present. There was complete loss of faradic contractions when the main nerve trunks were irritated. On the following day there was distinct reaction to both galvanism and faradism in the upper extremities, but not to faradism in the lower. The reaction to galvanism was not of the slow character, which constitutes the well-known reaction of degeneration. On the 17th of March, after his temperature suddenly went up to 39°C. (102.2°F.), he had profuse perspiration, with great thirst. This was followed by a complete disappearance of the paralytic symptoms. He remained well up to the 9th of April, when he again had complete paralysis of the four extremities, with loss of faradic reaction, which disappeared after twelve hours. Since the age of five years he has been subject to attacks of the above character, recurring every four to six weeks, and lasting from twelve to forty-eight hours. With the exception of scarlet fever, which was followed by nephritis, he was in

good health up to the time of his first paralytic seizure. Westphal acknowledged that he was unable to give a valid reason for the attacks.

In the discussion which followed, Bernhardt stated that paralytic symptoms resembling those described by Westphal at times followed intermittent fever. He also suggested the possibility of their being due to self-generated ptomaine-like substances, which acted not unlike curare, in paralyzing the motor nerve endings.

In proof of the non-malarial origin of the paralysis, Westphal mentioned the facts that the boy never suffered from intermittent fever and that his spleen and liver were normal in size, and that there had not been anæmia at any time.

The Canada Medical Association.—The annual meeting of the Canada Medical Association for 1885 was last year fixed for Winnipeg in the month of August. Some weeks ago, however, the Secretary, Dr. Stewart, was notified that, at a meeting of the profession in that city, it had been decided to request the Association to postpone its proposed visit until some future occasion. This action was reluctantly forced upon them by the present unsettled state of the country, owing to the Riel Rebellion and the absence of a number of their medical men with the military forces. The decision has been a great disappointment to many of our *confrères* in these eastern provinces, who had looked forward to availing themselves of attendance at that meeting whilst securing a pleasant summer holiday. We have also been informed that quite a number of medical men from the eastern cities of the United States had expressed their intention to be present, the growing interest in our north-western territories being one of the chief attractions. Much, however, as we may regret the decision arrived at, we have no doubt that it has not been reached without the careful consideration of all those concerned.

It may be remembered that last year, at Montreal, the gentlemen representing the town of Chatham, Ont., stated the desire of that enterprising place to receive the Association, but

were prepared to give way in favor of Winnipeg. In view of the inability of the latter to make the necessary arrangements, Chatham has again very generously come forward and renewed its invitation. This has been accepted, and we have now to announce that the annual meeting will be held at *Chatham, Ont., on the 2nd and 3rd September next.* We learn from the Secretary that several papers have already been promised, and everything bespeaks a large and successful gathering. We hope that all who can will be present and assist in making it so.

There is a matter which has been already discussed, and to which we would again draw the attention of the executive officers. It has been the custom, hitherto, for the local fraternity to entertain the entire Association. In the larger cities, where our numbers are greater, the burden of this may not be felt, but in smaller towns, with correspondingly smaller number of local members, the expense must be more than we could fairly expect them to bear. When the British Medical Association holds its meeting, there is also an annual dinner, but then every member who attends the latter pays a guinea for his ticket. We know that there is a strong feeling here that a similar rule should be adopted at our annual symposium, and would be glad to see it passed and acted upon at the Chatham and all subsequent meetings.

The following are the officers of the Association :—

President—Dr. Wm. Osler, Philadelphia.

General Secretary—Dr. James Stewart, Montreal.

Treasurer—Dr. Sheard, Toronto.

Vice-Presidents—For Ontario—Dr. Bray, Chatham; Quebec—Dr. Geo. Ross, Montreal ; New Brunswick—Dr. Allison, St. John ; Nova Scotia—Dr. Fraser, Windsor ; Manitoba—Dr. Whiteford, Winnipeg.

Local Secretaries—For Ontario—Dr. Burt, Paris ; Quebec—Dr. Jas. Bell, Montreal ; New Brunswick—Dr. Walker, St. John ; Nova Scotia—Dr. Almon, Jr., Halifax ; Manitoba—Dr. Mewburn, Winnipeg.

Medical Items.

MONTREAL DISPENSARY.—At a recent meeting of the Governors of the Montreal Dispensary, Dr. T. Johnson Alloway was elected gynæcologist to that institution, and Drs. R. J. B. Howard and J. A. Macdonald attending physicians.

MEDICAL HEALTH OFFICER.—Dr. Laberge has been appointed Medical Health officer for the city of Montreal. A growing epidemic of smallpox will tax all the doctor's energies, whilst in a hundred other directions he has ample scope to show what can be accomplished by well-directed assiduity and energy. We shall be happy to chronicle much improvement in our sanitary department under the new head. There is room for it!

ELECTRICAL APPARATUS.—In a series of notices of exhibits at the recent New Orleans Exposition, the Chicago *Tribune* says: "The McIntosh Galvanic and Faradic Battery Company of this city deserve especial mention for their fine display of goods and the wonderful improvement they have made in electrical goods generally, and especially for their combined solar microscope and stereopticon. It is an instrument that every school and college in the country should have. They received first medal for fine displays of electrical goods, and first medal for their combined solar microscope and stereopticon. Dr. L. D. McIntosh, the inventor, deserves great credit for arranging and making this display, because he met in competition the electrical inventions of Europe and America, and took the first medal."

THE BEES AND APOLLO—Once upon a time the Busy Bees were gathering honey from a flowery field on famed Hymettus. Suddenly, one Bee was heard to buzz much more loudly than the rest of his companions, who, upon listening, heard that he had found a new process for extracting a superior Honey of remarkable medical properties. He had also at the same time invented a very ingenious way by which he could with Comparative Ease make his Buzz sound four times as loud as that of the ordinary Bee. By means of these inventions he soon disposed

of large quantities of Honey at a High Price. But one day Apollo, who was experienced in the matter of Honey and its medical properties, came that way seeking some good sample for the use of his friend Diana who was a little ill. He looked at the new preparation, which was put up in chocolate tablets and called Honeyidea: He also listened to the new Buzz. "I think," he said, finally, "that the Buzz is much more wonderful and effective than the Honey; I will take it to Diana, who is found of buzzing."

Some days later, Æsop, on hearing this story, remarked that the Moral which he would add was that the Art of Advertising a new medicinal preparation is of more importance than the Art of making It.—*Boston Med. and Surg. Jour.*

—W. R. Warner & Co. have received the first premium at the World's Exposition, New Orleans, for great uniformity and solubility for their sugar-coated pills. This is the ninth World's Fair prize which attests to their excellence.

—Some time ago, at the suggestion of Dr. James H. Burns of Toronto, *Morse's Glycerole of Celery Compound* was placed before the profession to be used instead of the more powerful drugs in the treatment of teething infants and adults suffering from nervousness, etc., etc. The after effects of opium are well known and deplored. Upon young children, in any case, the continued use of opium is very objectionable. A remedy having the necessary soothing and quieting effects of opium, followed by a tonic and nutritive action to the patient, should be invaluable to the practitioner. Such a remedy we have in *Celery Compound*, which needs only a thorough trial to demonstrate its value. The proprietor guarantees the formula to contain *no opium in any form*, and only the ingredients therein mentioned, flavored with anise. It can be given in large doses, as a tonic, to the most delicate infant, with perfect safety.